

## ICE-HE Ethernet Head End

### Applications

Schools  
Retail Stores  
Sports Venues  
Civic Facilities  
Corporate Buildings  
Houses of Worship  
Entertainment Spaces



### Sales Support

*Planning an iC-Net or SignStream application? Our Sales Support staff will be happy to work with you, providing expert integration assistance and a complete systems proposal.*

### Tech Support

*Need tech help? Give us a call. Our tech support staff are experts in the integration industry, so we can research solutions in the proposal stage, advise on programming requirements, and resolve installation issues.*

*Our job is to make our solutions work seamlessly with your system, performing as promised.*

### Related Products

*SignStream HDTV Digital Signage  
iC-Commander HD Display System  
ABC-Net Media Access System  
iC-Net Smart Display Controllers  
iC-Net Display Controllers  
iC-Net Tuner Controllers*

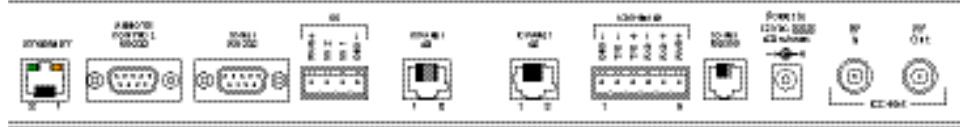
The ICE-HE iC-Net Head End is a control modulator that injects control commands from RS-232 or Telnet into the TV system RF coax wiring. Sent much like a standard TV channel, the iC-Net signal creates a two-way control pathway between display controllers and system software.

Installed at the RF system head end, with the unit's RF output is combined with other TV channels. The micro control channel operates in a gap between channels 4 and 5, and doesn't interfere with existing channels.

- Networks displays through existing RF CATV/MATV coax wiring
- Supports 2-way data connection over Ethernet and RS-232
- Internal Web pages for IP Telnet setup
- DIP switches on front panel for RS-232 control setup
- Interacts with Display Express software as well as custom control systems
- iCC-Net operates through same RF coax as TV channels, requires no additional control wiring
  - Clear-channel send and receive frequencies compatible with all CATV distribution systems
  - Operates over a standard low-split cable system, simplifying installation and support
- Sends commands to individual devices, zones, or all units from a single RS-232 or IP Telnet port
- Includes local control buttons and I/O ports that can trigger events in control systems
- Mounts on shelf or 19" equipment rack

# ICE-HE Ethernet Head End

## Specifications



ICE-HE Back Panel



ICE-HE Ethernet Head End

Feature	
<b>Physical</b>	19" [483mm] W x 1.75" [38mm] H (1RU) x 9" [229mm] D 3 lbs [1.36kg] All aluminum with durable black powder coat paint Shelf or 19" equipment rack (mounting brackets included)
<b>Front Panel</b>	<b>RF Out Adjust:</b> Trims iCC-Net channel output, shipped set to +55 dBmV <b>RS-232 TX LED:</b> Yellow LED, lights when receiving RS-232 data on either RS-232 port <b>RS-232 TX LED:</b> Yellow LED, lights when receiving RS-232 data on either RS-232 port <b>RS-232 DIP Switch:</b> Sets RS-232 baud rate (9600 - 38.4K), 8 data bits, no parity, 1 stop bit Selects high/low sensitivity for RF In signal <b>Net LED:</b> Green LED for iC-Net bus Flashes once per second if network is operating, device numbers agree Flashes twice per second if the number of present and expected devices do not match <b>COM LED:</b> Yellow LED blinks when a valid command is received or system response sent through the Control port <b>Error LED:</b> Red LED indicates a problem within the unit <b>Reset/Default:</b> White button sends press and release response to control software <b>Emergency:</b> Red button sends press and release response to control software <b>Ethernet LEDs:</b> RX/TX LEDs indicate Ethernet data send and receive (ICE-HE only)
<b>Rear Panel</b>	<b>Control RS-232:</b> DB9 female, RS-232 data link to control system or PC <b>iC-Net RS-232:</b> DB9 female, RS-232 data link to send iCW-Net over fiber (with fiber RS-422 interface) or codec <b>I/O 1 &amp; 2:</b> 4-pin captive screw terminal for Input/Outputs 1 and 2, 2 switch closures or inputs, max 50 mA, 24 VDC, switch to GND <b>I/O Applications:</b> DC power - close pins 1 & 3 to provide DC on/off Dry closure 2 - close pins 3 & 4 for dry contact to external power relay, AMX PC1 or similar Sense closure (3 & 4) on Input 1 - trigger control system to power off for all rooms <b>iC-Net Expand:</b> RJ-11 female 6-pin Telco jack, CAT3/CAT5 compatible unshielded, max 3,300 feet [1 Km] from Head End <b>Power In:</b> 2.1mm coaxial jack (inside center conductor positive), 300 mA maximum 11 to 18 VDC, 12 VDC typical (may be unregulated)
<b>Ethernet ICE-HE only</b>	<b>Ethernet:</b> 10/100baseT RJ-45 jack, RX/TX LEDs indicate Ethernet data send and receive <b>Ethernet LEDs:</b> Right bicolor LED - 100baseT, green full duplex, amber half duplex Left bicolor LED - 10baseT, green full duplex, amber half duplex
<b>iCC-Net</b>	<b>RF In:</b> 'F', female, 75 ohm impedance, receives data from 2-way controllers Sub-band, 5.6MHz -15 to +35 dBmV signal level (0 to +15 dBmV nominal) <b>RF Out:</b> 'F', female, 75 ohm impedance, RF distribution to TVs, tuners, and controllers Mid-band VHF, 74.7 MHz, narrow-band signal between channels 4 and 5 ± 80 KHz max carrier deviation, +55 dBmV maximum (default)
<b>iCW-Net</b>	<b>iCW-Net 2, 3:</b> RJ-45 female 8 pin Telco jack, supports 3300 ft [1 km] of wire, RS-422 type data requiring at least 2 twisted wire pairs with shield or fifth conductor - use Category 5 or Category 3 wire, 4 pair, unshielded, 24 AWG. <b>iCW-Net 1:</b> 6-pin captive-screw terminal for system wiring or for RS-422-format fiber
<b>Includes</b>	19" Mounting hardware 10 dB RF attenuator 12 VDC Power Supply (North American shipments only)
<b>Options</b>	CC-232 RS-232 Cable 74.5 Notch Filter to filter out interference at control frequency Cable/Subchannel Diplexer to direct feedback signal from 2-way controllers Low-Pass Filter to insert local media channels above cable frequencies

### Warranty

All CR products feature a full two-year warranty.

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