GENERAL INFORMATION

Ion Xe 20 provides complete control of conventional and moving lights, LEDs and media servers. It supports multiple users with partitioned parameter control and full backup, multiple playback faders and cue lists in a tracking, move-fade environment. The desk includes backlit buttons and 20 45mm non-motorized faders with associated displays.

FEATURES

- 2,048 or 12,288 outputs
- 32,768 control channels (any number from 1 - 99,999)
- Up to 99 discrete users
- Partitioned control
- Master playback pair with 100mm faders
- 20 45mm faders x 100 pages for configurable faders, submasters, masters and grandmaster control with two associated high-contrast monochrome LCD displays
- User-definable direct selects
- Four discrete palette types (IFCB)
- Presets function as “all palette”
- Effects provide dynamic relational and absolute progressive behavior
- Central information area (CIA) accesses the browser and other controls
- Four pageable encoders for non-intensity parameter control
- Configurable high-density channel display, with format and flexi-channel modes
- Up to six abstract color spaces, tinting, spectrum and fade path tools.
- User configurable, interactive Magic Sheets
- ETCNet 2™ and Net 3™ (powered by ACN), ArtNet and Avab® UDP network output protocols
- Show import from Obsession, Express™, Expression®, Emphasis®, Congo®, Cobalt®, Grand MA1, Grand MA2, Safari and Strand 500/300 Series
- Two individually configurable Ethernet ports
- Multiple MIDI and/or SMPTE TimeCode Inputs, Analog/Serial Inputs, OSC transmit/receive
- Virtual Media Server function for pixel mapped effects, images, animations
- Support for multiple languages, including English, German, Spanish, French, Italian, Japanese, Korean, Russian and Chinese (Simplified and Traditional)

ORDERING INFORMATION

**Ion Xe 20**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ion Xe 20 - 2K</td>
<td>Ion Xe 20, 2,048 outputs (minimum)</td>
</tr>
<tr>
<td>Ion Xe 20 - 12K</td>
<td>Ion Xe 20, 12,288 outputs (maximum)</td>
</tr>
<tr>
<td>Ion Xe RPU - 2K</td>
<td>Ion Xe Remote Processor, 2,048 outputs</td>
</tr>
<tr>
<td>Ion Xe RPU - 12K</td>
<td>Ion Xe Remote Processor, 12,288 outputs</td>
</tr>
<tr>
<td>Ion Xe 10K</td>
<td>After-sale 10K upgrade</td>
</tr>
<tr>
<td>ETCnomad 512</td>
<td>Client for Mac/PC</td>
</tr>
</tbody>
</table>

Output protocols are distributed using ETCNet2 DMX Nodes or Net3 DMX/RDM Gateways. VD Gateways and Show Control Gateways provide switch closure functionality, MIDI and SMPTE TimeCode.

**Ion Xe 20 Accessories**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eos MFW 10</td>
<td>Eos Motorized Fader Wing 10</td>
</tr>
<tr>
<td>Eos MFW 20</td>
<td>Eos Motorized Fader Wing 20</td>
</tr>
<tr>
<td>Eos FW 20</td>
<td>Eos Standard Fader Wing 20</td>
</tr>
<tr>
<td>Eos FW 40</td>
<td>Eos Standard Fader Wing 40</td>
</tr>
<tr>
<td>Net3 RVI3</td>
<td>Net3 Remote Video Interface</td>
</tr>
<tr>
<td>ETCpad</td>
<td>ETC Portable Access Device</td>
</tr>
<tr>
<td>Ion Xe - FC</td>
<td>Ion Xe Flightcase</td>
</tr>
</tbody>
</table>

Eos Family Offline Editor software for Mac and PC platforms is called ETCnomad and is available for download from www.etcconnect.com

Ion Xe 20 requires Windows 7 compatible external monitors, 1280x1024 minimum resolution, standard, touch or multi-touch

SHIPS WITH:

- Dust cover
- One Littlite
- Mouse and mousepad
- External alphanumeric keyboard
- Two active display-port to DVI adapters
- One locking IEC power cord
SPECIFICATIONS

SYSTEM CAPACITY
- 2,048 or 12,288 Outputs
- 32,768 Control Channels (devices)
- 10,000 Cues
- 999 Cue Lists
- 200 Active Playbacks
- 999 Submasters
- 100 Fader Pages
- 4 x 1,000 Palettes (Intensity, Focus, Color, Beam)
- 1,000 Presets (all palette)
- 1,000 Groups
- 1,000 Effects (relative, absolute or step)
- 99,999 Macros
- 1,000 Snapshots
- 1,000 Curves
- 1,000 Color Paths
- Supports two external display-port monitors at 1280x1024 minimum resolution, with optional touch or multi-touch control
- Solid-state hard drive
- Five USB ports for flashdrives, pointing devices, keyboards

DISPLAY FUNCTIONS
- All show data may be viewed on a single external monitor. External views may be posted separately or expanded across a maximum of two monitors. Three user-configurable workspaces per display, with split-screen/sizing controls.
- The Central Information Area accesses:
  - Browser
  - File Management
  - System Defaults
  - Show Defaults
  - Desk Defaults
  - Partition Definitions
  - Network Configuration
  - Show Data Utilities
  - Print to PDF
  - Record Target Lists
  - Patch functions
  - Help
  - Electronic alpha-numeric keyboard
  - Command Line
  - Selected Cue
  - Error messages
  - Context-Sensitive Control
  - Parameter Categories and individual parameters
  - Filters
- Channel Displays
  - Live channel or table view
  - Blind cue, palette, preset and group views, in list, channel, table and spreadsheet formats
  - User-configurable to show required parameters and/or parameter categories (IFCB)
  - Flexi-channel to determine which channels to display
  - Zoom allows user to define how many channels are viewed
  - Color-coded intensity levels indicate direction of move
  - Color-coded non-intensity levels indicate change from previous state
  - Graphic differentiation of moving lights, single parameter devices and unpatched channels
- Magic Sheets
  - User-defined interactive display layouts
  - Objects and images may be imported
- Patch Views
  - Patch by channel
  - Patch by address
  - Patch by Device List (RDM)
  - Assign proportional patch value, curve and, preheat value for intensity
  - Swap pan and tilt
  - Invert pan and tilt
  - Custom fixture editor
  - User configurable shutter order
- Playback Status Display
  - Accesses status of 100 fader pages
  - Expanded cue list for selected cue, optional dynamic countdown of active cues
- Cue List Index
- Effect Editor
- Group Editor
- Park Display
- Dimmer Monitoring
- Submaster List
- Fader Config Display

PLAYBACK CONTROLS
- Master Playback crossfade pair with two 100mm potentiometers, Go, Stop/Back and Load
- 50 pages of 20 45mm faders, each configurable as:
  - IFCB Palette/Preset Lists or single instances
  - Cue Playback, with user-configurable button/slider behavior
  - Grand Master with Blackout
  - Additive or Inhibitive Submaster, with user-configurable button/slider behavior
  - Filtered Manual Timing Master
- Rate Controller
- Playback fader controls include:
  - Load to assign cue lists
  - Timing Disable
  - Off/On
  - Release
  - Freeze
  - Assert
  - Manual Override
  - Rate
  - Go To Cue 0
  - Spread
  - Background Enable/Disable
  - 10 Priority States
  - 10 Background Priority States
  - Parameter and channel filters
- Macros
  - May be set to play background or foreground
  - Startup and Shutdown Macros
  - Disconnect Macros
SPECIFICATIONS

MANUAL CONTROL
- Channel selection from keypad and/or multi-touch direct selects
- Lists constructed with +, -, thru
- Intensity set with level wheel, keypad, level button, full and out
- Select Last recalls last sequential channel selection set
- Select Manual selects all channels with manual values
- Select Active selects all channels with intensity above zero
- Ordered groups
- Offset; including even, odd, random and reverse
- Fan
- Sneak
- User-definable home
- Home by parameter, parameter category or all non-intensity parameters
- Capture
- Park at level
- Scaled park for temporary percentage adjustment
- Recall-from and Copy-to commands
- About provides detailed view of selected channels or record targets
- Undo
- Highlight and Lowlight, with optional user-definable Rem Dim
- Lamp controls to strike and douse arc sources, calibrate devices

PROGRAMMING FEATURES
- Channel Functions
  - Non-intensity parameters set via numeric entry or pageable encoders
  - Encoders support software-controlled tactile response
  - Local display of color and gobo images
  - Color matching to gel selector
  - Color Path, color tinting and color spectrum tools.
  - Apply discrete time and delay per channel parameter
- Palette and Preset Functions
  - Record and Update
  - Toggle display to absolute data
  - Up to 999 decimal values may be inserted between any two whole numbers
- Effects
  - Create live or blind
  - Pattern-based relative dynamic effects
  - Absolute effects
  - Step effects
  - Channel level overrides
  - Cue level overrides
  - Entry mode determines how parameters enter effects
  - Exit mode determines how parameters depart effects
- Cue Recording
  - Cue List HTP/LTP Intensity
  - Cue List Priority and Background Priority
  - Cue List Assert
  - Fader as progress controller, manual or intensity master
- Curve
  - Assignable in patch to modify dimmer output ramp
  - Assignable at cue or cue part level to modify intensity crossfade profile or non-intensity parameter ramping

SPECIFICATIONS

- Follow or hang times
- Out of sequence link
- Loop functions
- Cue level parameter category timing
- 20-part multi-part cues
- Cue-level rate override
- Mark flags for Auto or Referenced and Referenced Priority Marks
- Up to 999 decimal cues between each two whole-numbered cues
- Execute List
  - Triggers snapshot
  - Triggers macros
  - Triggers go of other cues
  - Syncs go to multiple cue lists
  - Show-control triggers
  - Analog triggers
- Update and Update Trace functions
- Undo record and delete
- Submaster Recording and Playback
  - 999 additive or inhibitive submasters
  - Bump button timing for fade up/dwell/fade out
  - Assert/Channel select button
  - Exclusive or Shielded Mode
  - Background enable/disable
  - Restore to background or minimum value
  - LTP/HTP intensity
  - Fader as progress controller or intensity master
  - Bump button to mark NPs
  - Priority and Background Priority status
  - Motorized faders match level across all devices and when paging
  - Submaster mapping on the fly
- Curves
  - Assignable in patch to modify dimmer output ramp
  - Assignable at cue or cue part level to modify intensity crossfade profile or non-intensity parameter ramping

INTERFACES
- Two individually configurable ethernet ports
- ETCNet2, Net3 (powered by ACN), ArtNet and Avab UDP output protocols
- Four DMX/RDM ports
- Contact-closure triggers via D-Sub connector
- Two video connectors support display-port external displays (1280x1024) with optional single-touch or multi-touch screen control
- USB multipurpose (five ports)
- OSC Transmit/Receive
- UDP Transmit/Receive
- MIDI TimeCode, MIDI Show Control through Gateway
- SMPTE TimeCode through Gateway
- Contact closure (12 analog inputs, 12 SPDT contact outputs, RS-232) through Gateway

ELECTRICAL
- AC input (100 - 240V at 50/60 Hz)
- Power consumption (less external monitors) approximately 1 amp at 120V or 230/240V
**Ion Xe 20** Console

**Eos Series**

---

**PHYSICAL**

**Ion Xe 20 Dimensions**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>HEIGHT</th>
<th>WIDTH</th>
<th>DEPTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ion Xe 20</td>
<td>4.10</td>
<td>29.30</td>
<td>14.24</td>
</tr>
<tr>
<td>Ion Xe 20 in shipping container</td>
<td>7.75</td>
<td>36.50</td>
<td>18.50</td>
</tr>
<tr>
<td>Ion Xe 20 in roadcase</td>
<td>8.34</td>
<td>45.12</td>
<td>19.45</td>
</tr>
</tbody>
</table>

**Ion Xe 20 Weights**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ion Xe 20 console</td>
<td>16.6</td>
</tr>
<tr>
<td>Ion Xe 20 in shipping container</td>
<td>22.5</td>
</tr>
<tr>
<td>Ion Xe 20 in roadcase</td>
<td>46.7</td>
</tr>
</tbody>
</table>

*Weight and dimensions typical*