ETL us ETL c CE **100V 115/120V 230/240V**

ORDERING INFORMATION

Ion

PART NO.	DESCRIPTION
4310A1112	Ion Control Desk, 1,024 outputs (min) (Option for 6,144 outputs (max)
4310A1224	Ion Remote Processor Unit (RPU) 2,048 outputs (Max is 6,144)
4310A0065	Ion Initial Upgrade 5,120 outputs
4310A0060	Ion After-sale Upgrade 5,120 outputs
4310A0064	Ion RPU Initial Upgrade 4,096 outputs
4310A1019	Ion RPU After-sale Upgrade 4,096 outputs
4380A1011	ETCnomad 512 (as Client Software Kit)

Two universes of DMX 512A output are available at the console via 5-pin XLR. RDM is supported from Net3 Gateways. Network equipment must be purchased separately.

Note: Windows XP-based Ion desks can only be upgraded to 3,072 Outputs. Contact ETC for quotation. Win 7 Ion desks can be upgraded to 6,144 outputs.

Ion Accessories

PART NO.	DESCRIPTION
4250A1022	Net3 Radio Focus Remote (RFR)*
4310A1004	Universal Fader Module, Black - 1x20 faders
4310A1002	Universal Fader Wing, Black - 2x10 faders
4310A1003	Universal Fader Wing, Black - 2x20 faders
4250A1217	Net 3 Remote Video Interface (RVI)
M8200-F	27"10-point Multi-touch Screen, 1920x1080 res.
M8199-F	23"10-point Multi-touch Screen, 1920x1080 res.
PSR1044	Ion/Congo jr Flight Case (Desk only or with Fader Module)
PSR1037	Ion/Congo jr Flight Case (Desk with Fader Wing), Trolley Style

*Multiple transmitters and receivers can be used in a system design
Free ETCnomad software for Mac and PC platforms (use as Client) is available for download from www.etcconnect.com

SHIPS WITH:
- Dust Cover
- Mouse and Mousepad

GENERAL INFORMATION

The Ion control desk fully integrated control of LEDs, conventional and moving lights in a compact, portable package. Up to four control devices, each with its own workspace, can be used for programming and playback. Synchronised backup is also optional. With Universal Fader Wings, multiple cue lists and up to 999 submasters are available.

- 1,024 or 6,144 outputs
- 16,000 channels
- Four Discrete Users
- Master playback pair with 60mm faders
- Four discrete palette types (IFCB)
- Presets function as "all palette"
- Effects provide dynamic, relational or absolute progressive action
- Central information area (CIA) accesses electronic alpha keyboard, hue and saturation colour picker, gel picker, browser and other controls
- Configurable high-density channel display, with format and flexi-channel modes
- User configurable topographical channel views
- List views of all record target
- Net3/ACN, ETCNet2, Art-Net and Avab UDP protocols
- Show Import via ASCII from Obsession, Express, Expression, Emphasis, Congo, Cobalt, Grand MA1and Strand series 300/500 control desks
- In/Out: local DMX512-A/RDM x 2, MIDI In/Out, Networking DMX, MIDI, SMPTE, SERIAL and contact closure via Net3 Gateways
- OSC Transmit/Receive
- UDP Transmit/Receive
- Virtual Media Server function for pixel mapped effects, images and animations
- Support for multiple languages, including English, German, Spanish, French, Italian, Japanese, Korean, Russian and Chinese (Simplified and traditional)

ETC.

SPECIFICATIONS

SYSTEM CAPACITY
- 1,024 or 6,144 Outputs
- 16,000 Channels
- 10,000 Cues
- 999 Cue Lists
- 4 x 1000 Palettes (Intensity, Focus, Colour, Beam)
- 999 Submasters
- 1000 Presets (all palette)
- 1000 Groups
- 1000 Effects (relative, absolute or step)
- 1000 Macros
- Supports 2 external DVI monitors or 1 DVI + 1 Display Port monitor at minimum 1280x1024 resolution, with optional touchscreen or multi-touchscreen control
- SSD (Solid State) hard drive
- USB ports for flash drives, pointing devices, keyboards

DISPLAY FUNCTIONS
- All show data may be viewed on one or two external monitors. Views may be expanded across both from easily accessed front panel controls. 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
  - Network Configuration
  - Show Data Utilities
  - Printing
  - Record Target Lists
  - Patch functions
  - Help
  - Hue and Saturation Colour Picker
  - Electronic alpha keyboard
  - Command Line
  - Selected Cue
  - Error messages
  - Parameter categories and individual parameters
  - Filters
- Channel Displays
  - Live channel or table view
  - Blind cue, palette, preset and submaster 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
  - Colour coded intensity levels indicate direction of move
  - Colour coded non-intensity levels indicate change from previous state
  - Graphic differentiation of moving lights, single parameter devices, unpatched channels and deleted channels

SPECIFICATIONS

- Magic Sheets
  - User-definable interactive views
  - Images and symbols may be imported
- Patch Views
  - Patch by channel
  - Patch by address
  - Patch by device (RDM)
  - Assign proportional patch value, curve, preheat value for intensity
  - Swap pan and tilt
  - Invert pan and tilt
  - Custom fixture editor
- Playback Status Display
  - Graphical representation of cue list status, past and future cues
  - Expanded cue list for selected cue
- Cue List Index
- Effect Editor
- Group Editor
- Park Display
- Fader Display
  - Isolates display to active output by fader contribution
- Dimmer Monitoring

PLAYBACK CONTROLS
- Master Playback crossfade pair with two 60mm potentiometers, Go, Stop/Back and Load buttons
- Grand Master with Blackout
- Playback fader controls include:
  - Timing Disable
  - Off
  - Release
  - Manual Override
  - Rate
- A maximum of 200 playback faders and 300 submasters (additive or inhibitive) via optional fader wings
- A total of six Universal Fader Wings can be attached.

MOVING LIGHT CONTROLS
- Four rotary encoders with toggle state, which posts selected parameter to command line
- Labeling and current parameter value in integral LCD display
- Focus, Colour, Form, Image, Shutter and Custom paging controls
- Flip
- Parameters selectable by category (IFCB), sub-category (Form, Image, Shutter) or individually for command line actions, such as setting discrete timing

SPECIFICATIONS

MANUAL CONTROL
- Channel selection from keypad and/or virtual direct selects
- Lists constructed with +, -, thru
- Intensity set with level wheel, keypad, "full" and "out"
- Select Last recalls last sequential channel selection set
- Ordered groups
- Offset, including even, odd, random, reverse
- Fan
- Sneak
- Remainder Dim and restore
- 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 manual control, record, update and delete operations
- Highlight and lowlight, with optional Rem Dim
- Lamp controls to strike, douse and calibrate fixtures

PROGRAMMING FEATURES
- Channel Functions
  - Non Intensity parameters set via numeric entry or pageable encoders
  - Colour matching to gel selector or Hue/Saturation colour picker
  - Apply discrete time and delay per channel parameter
- Palette and Preset Functions
  - Record, Record Only and Update functions
  - Toggle display to absolute data
  - Up to 99 decimal values may be inserted between any two whole numbers
  - Filter states to refine contents of record targets
  - Selective store to refine contents of record targets
- Effects
  - Create live or blind
  - Pattern based relative dynamic effects
  - Absolute effects
  - Step effects
  - Cycle time, trail and grouping determine channel distribution and behavior when moving through effect
  - Duration of infinite, a specific amount of time or number of passes through pattern
  - Effect attributes to modify basic behavior
  - Cue Level Overrides
  - Channel 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 Independent
  - Cue List Assert
  - Record manual values or channels in use
  - Autoplay back recorded cues

SPECIFICATIONS

- Referenced mark instructions or auto-mark
- Block at cue or parameter level
- Assert at cue or parameter level
- Allfade flag
- Follow or hang times
- Out of sequence link
- Loop functions
- Preheat enable
- Cue level parameter category timing
- 20 part multi-part cues with default part assignment
- Cue level rate override
- Up to 99 decimal cues between each two whole numbered cues
- Execute List
  - Triggers macros with delay
  - 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
- Submasters
  - Additive, effect or inhibitive
  - Bump button timing to fade up, dwell and fade out
  - Assert/Channel select button
  - Exclusive or shielded mode
  - Faders as progress controllers or intensity master
  - Bump button to mark NPs
  - Independent status
- 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 DMX512-A/RDM ports
- Two Ethernet ports (Net3/ACN, ETCNet2, Art-Net and Avab UDP output protocols
- Contact Closure triggers via D-Sub connector
- Two DVI connectors supports two external DVI displays (minimum 1280x1024) with optional multi-touch screen control
- One Display Port connector (May be used together with one of the DVI connectors at the same time)
- Seven USB Multi-purpose ports
- Phone Remote (using a standard DECT phone)
- iRFR Remote App (iOS) and aRFR App (Android)
- Net3 Radio Focus Remote (RFR)
- MIDI In/Out (Timecode, Show Control)
- Additional MIDI Timecode, Show Control through Gateway
- SMPTE Timecode through Gateway
- Additional contact closure (12 analog inputs, 12 SPDT contact outputs, RS-232) through Gateway

ELECTRICAL
- AC input (100-240V at 50/60 Hz)
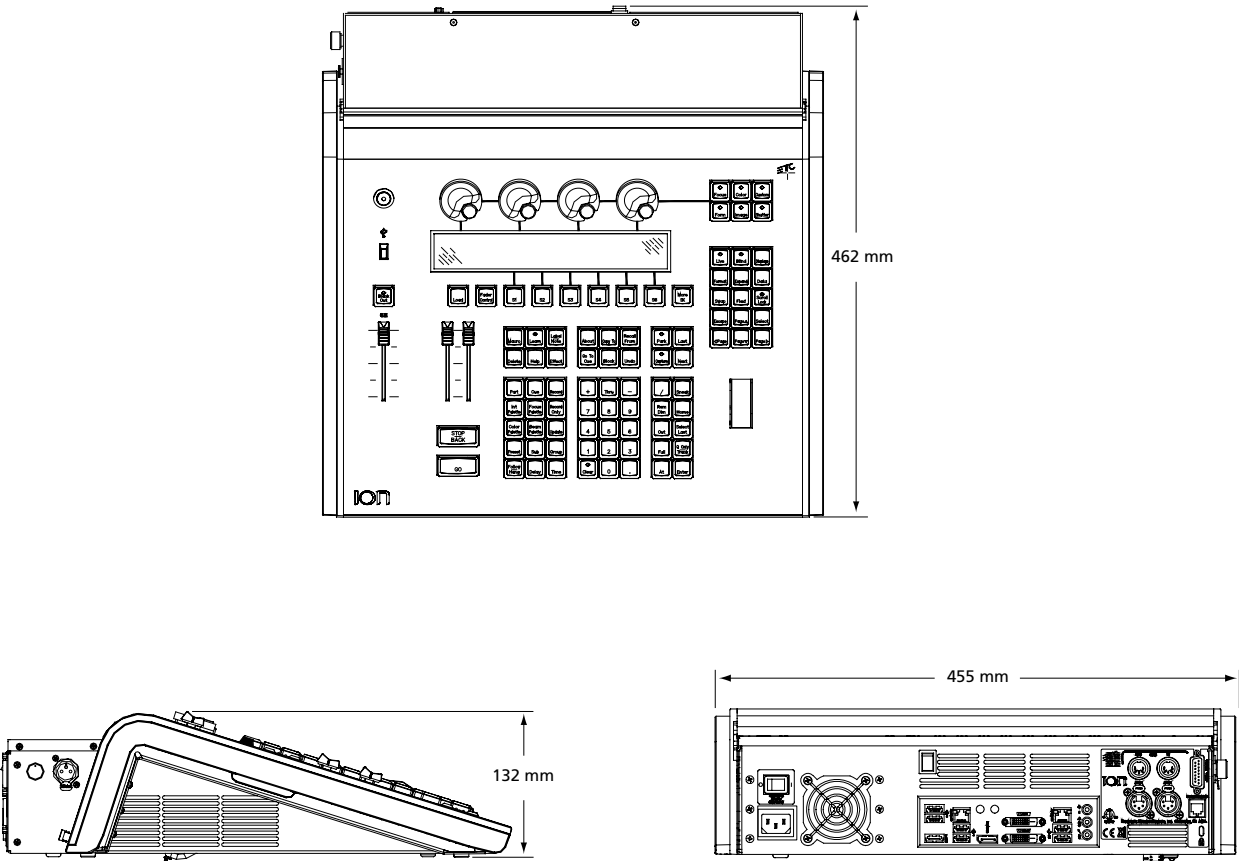- Max. 1A power consumption at 230/240V

PHYSICAL

Ion Dimensions*

MODEL	HEIGHT	WIDTH	DEPTH
	mm	mm	mm
Ion desk	132	455	462

Ion Weights*

MODEL	WEIGHT	SHIPPING WEIGHT
	kgs	kgs
Ion desk	9.2	10.6

*Weights and dimensions typical

462 mm

132 mm

455 mm

AVAILABLE FROM