



## GENERAL INFORMATION

Full-featured console for control of conventional and moving lights, media servers and LEDs with built-in, articulating, high-resolution multi-touch displays, backlit command keypad, keyboard tray, 40 hands-on multipurpose masters (20 motorized faders + 20 endless backlit potentiometers), preset operation, main crossfader playback and full network capabilities, including backup and multi-console operation.

### FEATURES

- 4,096 base and up to 16,384 outputs/parameters (32 universes of DMX512A)
- 5000 control channels (nameable up to 9999)
- Partitioned control
- Main playback crossfader pair for theatrical-style sequence with split spring-loaded rate controls
- 40 Master Playbacks consisting of 20 motorized master faders plus 20 backlit endless potentiometers; full-color displays
- Two 17.3" multi-touch LCD touchscreens for display, direct selection and context-sensitive control
- Four encoders with wheel keys
- Backlit command keypad
- Built-in keyboard drawer
- High-density channel display with formats for channel sorting
- Channel layouts for topographical views of channels and other show data
- Live attributes display for spreadsheet view of devices
- List views and editors for presets, groups, palettes, sequences, chase, dynamic, content and image effects
- Integrated electronic manual and help system
- Integral alpha keyboard for labeling
- MIDI in/out
- ETCNet2, Net3/ACN, sACN, ArtNet Ethernet protocols
- RDM via local DMX ports and Net3 DMX/RDM Gateways
- Show import via ASCII (Avab Safari, Expert, Pronto, Presto, ETC Expression®, Express™, Strand 500)
- Support for multiple languages, including English, German, Swedish, Polish, Spanish, French, Italian, Japanese, Russian

## ORDERING INFORMATION

### Cobalt 20

MODEL	DESCRIPTION
CBLT20-US	Cobalt 20 Console, 4,096 Outputs, US Accessories
CBLT-LS-US	Cobalt Light Server, 4,096 Outputs
ETCNOMAD	Cobalt ETCnomad, 1024 Outputs
CBLT512	Cobalt Output Upgrade, 512 Outputs

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

Cobalt 20 is offered as a base console with 5000 control channels and 4096 outputs (8 universes of DMX512A). A single control channel may control only intensity (dimmers) or it may control a DMX-controlled device (moving light, LED, media server, etc.).

To increase the capacity of the console, order additional 512-output upgrades.

For example, to take the console to its maximum configuration, order a console and twenty-four (24) 512-output upgrades.

4096 outputs + (24x512) = 16,384 outputs (32 universes of DMX512)

Two universes are available at the console via 5-Pin XLR and all universes may be distributed via Ethernet-based methods, including Net3 DMX/RDM Gateways, ETCNet2 DMX Nodes and/or ArtNet nodes (purchased separately).

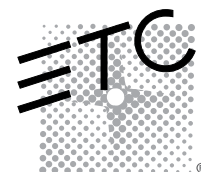
### Cobalt 20 Accessories

MODEL	DESCRIPTION
Cobalt MFW20	Cobalt Motorized Fader Wing 20
Cobalt MFW10	Cobalt Motorized Fader Wing 10
NET3 RFR	ETC Net3 Radio Focus Remote
NET3-RFR-RX	ETC Net3 Radio Focus Remote, receiver only
NET3-RFR-TX	ETC Net3 Radio Focus Remote, transmitter only
CBLT Littlite	Cobalt Littlite® Worklights (spare)
CBLT20 Flightcase	Cobalt Flightcase
NET3 RVI	ETCNet3 Remote Video Interface
19" LCD	19" Flat-screen display (1280x1024)
19" LCD-T	19" Touchscreen display
WMON	Wide-format flat-screen display
WMONTS	Wide-format multi-touch display

Cobalt Offline Editor software for Mac and PC platforms is available for download from [www.etconnect.com](http://www.etconnect.com)

### SHIPS WITH:

- Power cord
- Dust cover
- Two Littlite® worklights
- Mouse and mousepad
- External alpha-numeric keyboard (US model only)
- Three male-to-female IEC cables



## SPECIFICATIONS

**SYSTEM CAPACITY**

- 16,384 Outputs/parameters
- 5,000 Control Channels
- 9,999,999 Presets
- 4 x 999 Palettes (Focus, Color, Beam, All)
- 999 Groups
- 999 Macros
- 999 Sequences
- 999 Master Pages
- 99 Effect Playbacks
- Supports three external DisplayPort monitors starting at 1280x1024 resolution with optional touchscreen control
- Solid-State Hard Disk
- 11 USB 2.0 ports for USB flashdrives, pointing devices, keyboards

**DISPLAY FUNCTIONS**

- Tabbed navigation of graphical screens
- All show data may be viewed on a single monitor
- Screen layouts may be recorded for quick recall
- Browser
  - File Management
  - Show Data lists
  - Patch Displays and functions
  - Help
- Channel Displays
  - Live, Blind, Preset, Sequence and Group Editors
  - High-density views of channel data
  - Format allows user to choose a packed Flexichannel-style view of channels
  - Zoom allows user to define how many channels are viewed
  - Current direction of fade and preview of next intensity move
  - Color-coded intensity levels indicate HTP winner
  - FCB indicators of changed or moving data
  - Channel-number color indicates intensity only or device
  - Channel texts and device type displayed on channel
  - User-selectable level of detail: more channels/less information or fewer channels with more information
  - Context menus for often-used commands
- Channel Layouts
  - 999 Channel Layouts
  - User-defined topographical view of channels
  - May include other types of data – Presets, Palettes, Groups, etc.
  - Auto-selectable (visible layout changes based on channel selection)
- Attribute Displays
  - Live Attributes with Formats to display current rig status
  - Parameters may be edited directly in the Live Attributes tab
  - Attribute views in editors for viewing and editing parameter and time/delay data

## SPECIFICATIONS

- List Views
  - High-density view of recorded data
  - Group, Focus Palettes, Color Palettes, Beam Palettes, All Palettes, Preset, Sequence, Dynamic Effects, Master Page List views
  - Apply text labels to show data
  - Access Editor displays from within list views
- Editor Views
  - View and edit show data within editor views
  - Group, Focus Palettes, Color Palettes, Beam Palettes, All Palettes, Preset, Sequence, Dynamic Effects, Master Page, Template Editor views
  - Multiple editor views may be open at the same time
  - Organizer view for drag and drop editing/importing of data
- Patch Views
  - Output Editor
  - Channel List, Output List, Device List
  - Channel Database for applying up to four labels to each channel
  - Patch Wizard for clearing patch, range patching and device 'next available' patching
  - Comprehensive device library with calibrated color data, gobo bitmaps
  - Custom device template editor
- Playback Views
  - Main Playback view
  - Connected Master Playback view
  - Timeline view of current crossfade progress and preview of next crossfade
  - On-screen playback controls
  - Drag-and-drop sequence editing

**PLAYBACK CONTROLS**

- Main Playback crossfader pair for theatrical-style sequence with split spring-loaded rate controls
- Master Playback for connection to sequences on the Masters
- Manual or timed fade control
- 999 Sequences (triggered by manual playback, "Go" or chaser mode)
- Grandmaster fader
- Blackout/On/Freeze rotary switch

**MASTERS SECTION**

- 80 multipurpose master fields
- 40 master playbacks with full-color graphical LCD displays
- Top and bottom rows of master playbacks may be independently assigned to any bank of 20 masters
- Bottom 20 master playbacks with motorized faders and master/flash keys
- Top 20 master playbacks with backlit color-coded endless potentiometers with built-in flash key and master key
- 999 Master Pages
- Masters may be independently paged in banks of 20 faders (top/bottom)
- Paging and range selection for each bank of Masters
- Channels Only and Device Mode keys
- Masters Mode key

## SPECIFICATIONS

## DEVICES SECTION

- Four Encoders with keys
- Focus, Color and Beam encoder pages
- User-defined encoder pages
- Interactive touchscreen device controls
- Interactive touchscreen direct selects
- Highlight, Fan and Mask
- Dynamic group selection
- Device controls dock with touch- or mouse-based control features for all parameters without paging and a color picker

## INDEPENDENT SECTION

- Six rotary faders
- Three switches with LED indicators
- May contain any channel data, including attributes
- Switches may be assigned latch or momentary operation
- All may be assigned inclusive, inhibitive or exclusive operation

## BACKLIT PROGRAMMING PAD FEATURES

- Channel Functions
  - Selection lists constructed via touchscreen or keypad Channel, +, -, Thru keys
  - Levels set with direct selects, level wheel or @ Level key
  - Assign palettes and dynamic effects quickly
  - Assign channels to masters
- Preset Functions
  - Record and update
  - Apply timing
  - Fetch and select data based on recorded presets
  - Assign presets to masters
- Sequence Functions
  - Create and assign sequences to the main playback and masters
  - Insert and edit steps
  - Apply step timing
- Group Functions
  - Create and edit groups
  - Assign groups to masters
- Palette Functions
  - Create and edit palettes
  - Assign palettes to masters
- Effects Functions
  - Insert effect playbacks for chase, dynamic, content and image effects
  - Adjust parameters of effect playbacks on the fly
  - Create chase objects
  - Create effect series and channel sets
  - Create and edit dynamic-effect templates
  - Assign dynamic effects to channels
  - Insert running dynamic effects into the library
  - Modify running effect playbacks
  - Assign effect playbacks to masters
- Electronic Manual and Help System
  - Up-to-date documentation provided within every software release
  - Text-based search function within console
  - Create favorites and add notes/comments to electronic manual

## SPECIFICATIONS

## INTERFACES AND ACCESSORIES

- Two individually configurable Ethernet ports, 802.3af-compliant PoE
- ETCNet2™, Net3™ (powered by ACN), sACN and ArtNet output protocols
- Two DMX512A/RDM ports
- Contact closure triggers via D-Sub connector
- Three female IEC connectors
- Three video connectors support DisplayPort external displays (1280x1024 minimum resolution) with optional single- or multi-touch screen control
- USB 2.0 multipurpose (11 ports)
- Client PC via Ethernet (requires ETCnomad Dongle)
- Net3 Radio Focus Remote (RFR) via USB or Ethernet
- Phone Remote
- OSC Open Sound Control via Ethernet
- UDP event triggering via Ethernet
- aRFR for Android devices and iRFR for Apple iOS devices via wireless Ethernet
- MIDI in/out (MIDI TimeCode, MIDI notes, MIDI Show Control (MSC))
- MIDI TimeCode, MIDI Show Control through Net3 Show Control Gateway
- SMPTE TimeCode through Net3 Show Control Gateway
- Contact closure (12 analog inputs, 12 SPDT contact outputs, RS-232) through Net3 I/O Gateway
- Support for up to 40 additional master playback faders using Cobalt Motorized Fader Wings, Universal Fader Wings or the Congo jr Master Playback Wing

## ELECTRICAL

- AC input (100 - 240V at 50/60 Hz)
- Maximum power consumption (including external monitors) approximately 6.3A 120/240V

PHYSICAL

Cobalt Dimensions\*

MODEL	HEIGHT (MAX)		WIDTH		DEPTH	
	inches	mm	inches	mm	inches	mm
COBALT 20	15.5	393	40.8	1036	26.5	673

Cobalt Weights\*

MODEL	WEIGHT		SHIPPING WEIGHT	
	lbs	kgs	lbs	kgs
COBALT 20	97	44	132	59.9

\*Weights and dimensions typical. Cobalt 20 is shipped in a carton on a pallet. The shipping weight is the combined weight of the console on the pallet.

