Constellation XT
DREAM

FAIRLIGHT

Constellation XT DREAM

Bringing large-scale, multi-format work within your reach

Constellation-XT smashes through the price/performance boundaries for a fully integrated large scale digital recording, editing and mixing system. This latest generation mixing surface offers a combination of speed, functionality and work flow unattainable from any other console. An investment in Constellation-XT is an investment in sonic superiority and the most productive post production paradigm that money can buy.

Introducing Fairlight's Constellation-XT

Full Featured System

The DREAM Constellation-XT delivers up to 240 channels routed to up to 72 mix bus elements. This pool of 72 bus elements are divided up as required between a main bus, up to 8 sub busses and 12 auxiliary sends, all of which can be up to 7.1 in format, plus 24 mono multi-track busses. A 6-band EQ, including filtering and a two-stage dynamics processor is available on up to 144 channels simultaneously.

The comprehensive bussing system allows simultaneous generation of multiple surround formats, plus bus to bus mixing for multi-stem work. The unique grouping and panning system allows smooth and simple manipulation of the mix matrix to stunning effect, ensuring that the most complex surround sound mixes can be accomplished with ease.

Physical I/Os are available in analog, AES, AES SRC, and MADI formats and a sophisticated internal patching system allows totally free routing of inputs, outputs, and Busses between external and internal destinations.

The monitoring bus system is completely configurable with programmable fold-down and fold-up modes allowing instantaneous switching to up to 9 speaker sets each of which can be configuredfor any desired bus format.

Extensive Facilities

The DREAM Constellation-XT comprises a suite of control surface elements driving the QDC engine which may be fitted with a variable complement of channel cards. The Constellation-XT is available in several different chassis sizes, each of which may be configured with a choice of fader panels, channel assign Panels, In-Line panels (ILP) and meter bridges. The architecture of the system allows configuration options for most functions, including fader assignment, panel orientation, bus configurations, dynamics operation, panning, auxiliaries and most other major features. Central to the unique design of the DREAM Constellation-XT is the ability to access channel control and configuration facilities either locally, from a channel perspective, or globally from the central controller and ILP. DREAM Constellation-XT's extended control surface features moving touch sensitive rotary controls and faders throughout, allowing maximum accessibility and visibility of all facilities including the automation system. Multi-trim mode provides intuitive control of multiple channels from a single control, substantially speeding up most setup and mix processes.

The DREAM Constellation-XT's comprehensive automation system encompasses every parameter of every onboard function, including processing, routing and third-party plug-ins. DREAM Constellation-XT's powerful integrated audio editing tools can be applied to editing automation data as well.

A fully featured macro programming system with GPIO capability allows extensive customisation of key facilities, ensuring that DREAM Constellation-XT can be swiftly and easily integrated into any special workflow or configuration requirements. This capability is particularly powerful when you consider that the DREAM Constellation-XT is not only a powerful mixing system but also a complete recording and editing environment.

In addition to powerful core features, Constellation-XT can be extended with several exciting software options, including MediaLink, MediaLinkAV, Virtual Studio Runner and AudioBase3 Xtreme.

AUTOMATION

The DREAM Constellation-XT provides comprehensive dynamic automation of all mix parameters. DREAM automation is simple to navigate and operate. Motorised touch sensitive faders and knobs clearly show the current values of all parameters and allow instant direct access to control and modify on the fly.

Parameter Enable Matrix

Selecting which parameters to automate is made easy through a simple interactive selection process. A single parameter on a single feed may be selected to write or update by pressing the dedicated automation enable buttons on the Constellation-XT surface. Similarly, a selection of feeds or busses may be made with the selection keys and the required parameters enabled for that set. This approach makes complex control selections simple, guarding your valuable mix data and making automated mix modifications a breeze.

DREAM Constellation-XT systems are available in both standard and fully customisable frames. Standard sized frames are available in fully trimmed one, two, three, four and five bay versions. Custom consoles can easily be configured from any of the available component parts. These include chassis components (1 bay, 2 bay, 3 bay, 4 bay and 5 bay), a fully trimmed 45 degree angle section and a kit to provide the outer surface legs and end trim. A meter bridge rack mounting kit is also available for the accommodation of 19" rack mount equipment within the meter bridge.

The basic system requires either a CAP or ILP panel, one Fader Panel, an Editor Panel and a Channel Select Panel. Any other available chassis spaces can be fitted with additional fader panels (to a maximum of 60 faders), CAP panels, In-Line Panels or an optional left or right side mounted TFT screen. The surface can also be supplied with a meter bridge comprising of Main meters and Channel meters. Each Channel meter unit is fitted with 12 assignable high resolution 53 segment bar graph meters. The Main meter is fitted with 8 assignable high resolution 79 segment meters. The main meter unit is also fitted with VU meters and a phase meter.

Impact Studio, Tokyo

Robust, Repeatable, Integrated

Automation data is written into the disk recorder project file, simplifying project management tasks and ensuring the robustness, repeatability and perfect synchronisation of all mix automation.

Easily Edited with Trim and Touch Enable Modes

DREAM automation includes several methods of writing or updating automation data. The operator can punch in and out of automation and record manually using the IN and OUT keys, which can also be used to set IN and OUT points for automated drop-ins. Touch mode allows automation to be enabled on faders, knobs and buttons only as they are touched. All modes support adjustable Glide Out to smooth transitions between old and new automation data. New automation data may be written in absolute values or trimmed from the current levels by applying a relative trim offset.

Automation follows Audio Editing

DREAM Constellation-XT's sophisticated audio editing tools can be applied to editing automation data as well. Data can be cut, copied and pasted between tracks and clips either with the audio or independently of the audio.

Summary

The DREAM Constellation-XT is a fully featured digital audio mixing console with high-end automation and processing that provides the same level of operation and functionality found in other available large-format digital audio mixing consoles. The DREAM Constellation-XT is ready for any cinema playback format currently in widespread use, up to 7.1 channels. In addition DREAM Constellation-XT may also include a fully integrated 96 track disk recorder and editor. If that's not enough the system is delivered at significantly lower cost than any other available component systems and with an even higher degree of user-adaptability.

Constellation Hardware Features

The Constellation-XT Hardware layout provides an ergonomic working environment. No one control is ever very far away from the operator. The surface provides excellent visual feedback of channel status through its comprehensive use of embedded LEDS and backlit knobs and buttons. Visualizing channel assignments to busses and I/O patching couldn't be easier. Fader set buttons enable the user to map signals to faders in convenient groups. The Constellation-XT surface features unique touch sensitive motorized rotary encoders. Each rotary pot has a tri colour LED display at its base. The LED is used to indicate if the control is Recording (Red), has been automated (Green) or is in Trim mode (Amber).

Constellation Fader Panel

Each Constellation-XT fader panel provides support for twelve motorized touch sensitive rotary faders and controls for panning. Solo and mute buttons are positioned above the fader. The backlit LCD display above the fader displays the name of the signal. Level and Pan position are also displayed. The Call button will send the channel to the central assign panel. The Soft button provides insertion of automation. The Auto button is used to punch in automation for the channel. LED indicators above the fader show channel bus assignment to Main, Subs and Multitrack busses. If the fader is used for a track feed an LED is also provided to indicate ARM status of the track.

To the left of the fader, LEDs are provided to indicate automation modes such as Touch, Latch, Safe, Read, Write and Trim. Other LEDs indicate if the channel is a Track, Feed or Bus as well as Signal present. Insert, EQ and Dynamics, if in use, are also indicated.

Constellation-XT Editor Panel

In addition to housing the Fairlight Binnacle controller, the Editor panel provides dedicated controls for Transport functions, Macros, Auto-locate, numerical input functions, Project menus, Talk back, Monitor Speaker selection, and the Master fader. In the centre of the panel an LCD screen provides access to detailed menu functions including edit modes, Virtual Studio Runner, Track Bank switching, Project navigation and system setup and settings. The panel provides all the functionality of a DREAM Satellite system and in addition, centralizes the essential mix functions. The Talk back section provides single button pres access to two talk back destinations which can be easily switched across any Bus type, including subs and auxes. A dedicated macro pad provides access to three banks of nine user programmable Macros.

Channel Switch Panel

The channel switch panel provides easy access to all available signals: Live feeds, Tracks, Returns, Busses and speaker sets. In addition it provides access to the central automation system including the automation enables, matrix, and the speaker mute buttons.

Each switch features static or flashing Tri Colour LED lamps to provide a clear indication of current status and selected mode. The speaker set switches provide easy access to any of the 9 available speaker sets. Set-up switches for Bus assignment, Buss format, Link groups, I/O patching, Stem assignment and External channels are also provided. The fader set switches allow the user to map up to 10 signal combinations to the available faders on the surface. Dedicated automation mode switches allow the user to easily create mixes and enable the Constellation-XT's powerful automation system. A dedicated switch enables the automation to be edited along with the audio using the Fairlight Binnacle.

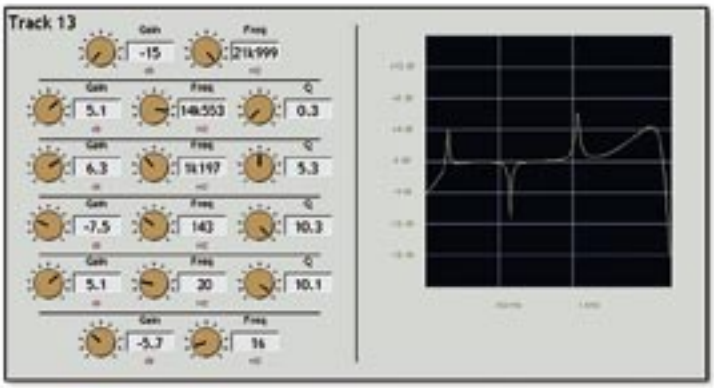
Constellation-XT CAP Panel

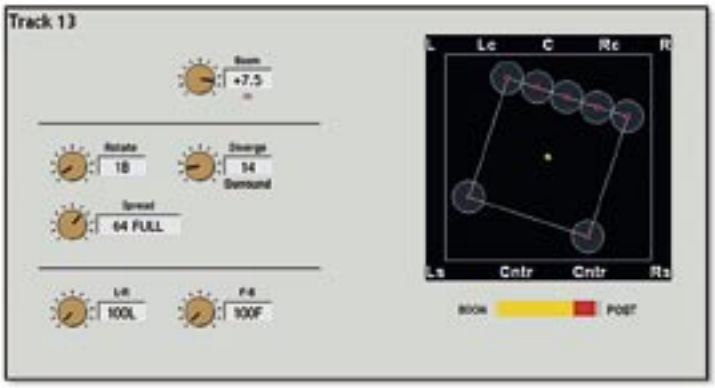
The Constellation-XT Channel Assign Panel is divided into five sections. These are the Input controls, Dynamics, EQ, auxiliary sends and surround pan control modules.

The input controls provide access to signal flow parameters such as level, phase, insert, I/O patch, Plug-ins and bus assignment. The Dynamics section controls the channel's two stage Dynamics processor, which includes a Gate and either an Expander or Limiter. The six Band equalizer controls are central to the panel. Each band of the EQ is provided with switchable filters types and dedicated level and frequency adjustment. The Auxiliary Send panel provides level send adjustment controls to all 12 Auxiliaries. Auxes 1-4 have dedicated controls and 5-12 are switchable across two sections. Auxiliaries may be configured to feed any bus type from mono to 7.1. If in use, the pan button will enable the rotary to vary the levels sent to each bus element by variation of the Left Right or Front Back. Automated In Out and Pre/Post fader switches are also provided. The Surround Panner module provides Joystick control as well as Rotary control functions for Spread, Diverge, Rotate and the Boom channel.

Constellation-XT In line Panel (ILP)

An In Line Panel (ILP) provides both dedicated and assignable controls of the channel's input settings, EQ and dynamics filters, auxiliary sends, surround panner and all of the currently inserted Plugins. The In Line Panel enables those operators who prefer a dedicated knob-per-function control surface to set up direct access to frequently required signal path parameters on a channel by channel basis. In addition, In Line Panels can be freely specified in any available surface panel space to create the mixing surface of choice. The ILP is fitted with 72 Organic Light Emitting Diode displays (OLEDs) allowing Fairlight to display at super high-resolution, detailed information on any selected parameter value. Unlike traditional LCDs, OLED displays are crystal clear in all light environments and from practically any viewing angle.



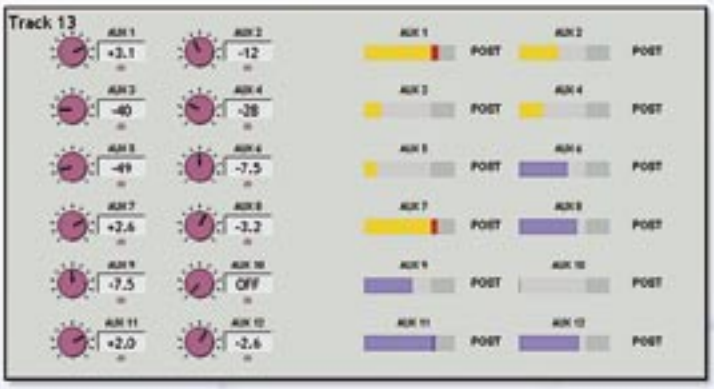


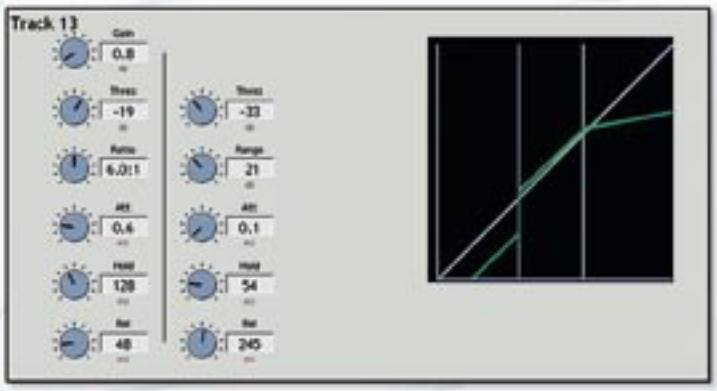
Equaliser

Each feed is provided with a fully featured six band equaliser. DREAM Constellation-XT provides a dedicated control for each function. Bands one and six can be switched between shelving and low/high-pass. The other four bands are fully parametric including shelving response. The EQ section has its own level compensation control and each band can be independently switched in and out and enabled for automation.

Panning

Panning may be applied to individual mono feeds or to multi-format Constellation-XT Channels. A Divergence control affects the amount of energy shared from a single element to the available outputs. In the case of a Constellation-XT channel two extra controls become available The "Spread" control effects the width of the signal feeding the Pan control. The "Rotate" control literally rotates the entire sound field as if the listener was turning around on the spot. The sub-bass or boom channel is provided with an individual level control within the panner.





Auxiliary Sends

The Auxiliary Sends section on the Channel Panel of the DREAM Constellation-XT has four discrete sets of controls for the first four auxiliary buses and two additional sets for the eight remaining available buses. Each of the twelve available auxiliary buses may be defined in any multi-channel format up to 7.1. The rotary control for each send can control the send level or panning.

Dynamics

Two independent dynamics sections are provided. The first is a fully featured compressor with control over threshold, level, compression ratio, attack time, release time, hold time and gain make-up. The second dynamics section can be configured as a limiter, an expander or a gate. The limiter offers control over the threshold level, gain make-up, attack, release and hold times. The expander and gate have controls for threshold level, expansion ratio, reduction depth (range), attack, release and hold times.

Plug-ins

The Plug-Ins Manager brings an integrated plug-ins system to the DREAM family. PlugIns Manager delivers sonically superior plug-in signal processing running on dedicated 40-bit floating point multi-processor DSP cards.Plug-Ins can be driven either from their on-screen graphical interfaces, or from faders, knobs and switches on the console control surface. In either case, the plug-ins integrate fully with the DREAM project structure and storage. Plug-Ins Manager is available in either a 6 DSP version or a 15 DSP version providing more than twice the horsepower. Plug-Ins Manager is supplied with a family of 80 high quality Creamware, real-time effects including sophisticated reverbs, multi-tap delays, phasers, choruses, flangers, deessers, autopans and many others. Additional third-party Plugins are available for purchase. Plug-Ins Manager provides support for VST PlugIns. This optional feature requires the system to be enabled with the PlugIn manager and Creamware Hardware. If enabled the user can activate VST PlugIns as part of the Plug-In system.

Plugin Manager Midi Support

This feature allows the user to access synthesizers and or musical instruments via midi from the Creamware hardware and the plug-in manager. Synthesizer voices will be mapped to the QDC I/O in the same way that the plug-in hardware is engaged.

Key Features

Constellation-XT

- Up to 240 Channel mix engine
- Up to 72 User definable busses Mono-7.1
- "Constellation-XT" Channel configurations from Mono to 7.1
- 8 Multi format Sub Busses
- 24 Multitrack Busses
- Bus to Bus mixing
- Bus reduction system for simultaneous mixing of multiple surround formats
- 12 Auxiliary sends User definable Mono-7.1
- Comprehensive Solo system AFL, PFL and SIP
- High end Automation featuring comprehensive matrix enables
- Intuitive touch aware automation modes
- Automation of all Console parameters including filters
- 2 Stage Dynamics Processing
- 6 Bands EQ Full range
- 4 Bands Clip based EQ full range
- Integrated 96 Track Disk recorder
- Binnacle Editing powered
- Automation follows editing of audio for Clip, Track and range based edits
- Powerful Undo Redo structure including Automation
- Touch sensitive motorized faders and rotary controls
- Comprehensive multi format surround panning
- Illuminated Status of Automation parameters
- Comprehensive monitoring options
- User programmable Macro Language for custom configurations
- Optional Integrated plug-ins with 80 plug-in library, VST support
- Networkable either peer to peer or server based
- Comprehensive server based SFX library management - AudioBase3
- Optional integrated Non Linear video system with Video editing
- Optional OMF1+2, AAF, AIFF, WAV, MP3, BCast WAV file conversion utility

DREAM Family Options

- Pyxis integrated Non Linear video system with Video editing
- Integrated plug-ins with 80 plug-in library, VST support
- DREAM Auto EDL conform
- Virtual Studio Runner for automatic electronic file import and delivery
- AudioBase3 Xtreme
- MediaLink network license
- AV Transfer software
- 96Khz software

DREAM Family Specifications

- Analog Inputs & Outputs
- Input impedance =10k Ohms
- Output impedance <55 Ohms
- Maximum input level +24dBu
- Maximum output level +24dBu
- Standard operating level adjustable from +14dBu to +24dBu
- Input signal to noise >113dB A-weighted (A/D conversion)
- Output signal to noise >113dB A-weighted (D/A conversion)
- Through system signal to noise >110dB A-weighted
- Through system THD <0.0008% typical
- Bandwidth (.25dB) 20Hz to 20kHz

AES/EBU Inputs

- Minimum differential 200mV
- Input impedance 110 Ohms transformer isolated
- Channel status QDC Technology systems are insensitive to channel status

AES/EBU Outputs

- Output level 4V
- Output impedance 110 Ohms transformer isolated
- Channel status, professional, normal audio, source locked
- sample frequency set to project sample rate, stereophonic, 24-bit word length

System Sample Rates

- 32, 44.056, 44.1, 48 and 96kHz (user selectable)

Run-up/Run-down Sample Rates

- 44.056, 44.144, 47.952, 48.048, 95.904, 96.096kHz

SRC Range (with optional SRC I/O module)

- Input: 0.33 to 3.0x system sample rate with range limits of 15kHz to 108kHz

Clock References

- Internal, AES reference, WCLK, any Digital Input, Video Reference or LTC input
- The system may be run at 96kHz locked to a 48kHz reference, or at 48kHz locked to a 96kHz reference.

Specifications subject to change without notice.

Virtual Studio Runner

Virtual Studio Runner is a powerful new Trafficking and Ingest solution from Fairlight that maximizes productivity, cuts costs and prevents errors. Virtual Studio Runner enhances and extends the DREAM Studio Environment with electronic trafficking, automated ingest and offline archiving capability. Using Fairlight's MediaLink server technology as a host, Virtual Studio Runner can convert and send files via email or FTP directly to clients or to an internal mailbox for Quality Assurance, all directly from the DREAM control surface. A centralised list of contacts and customisable file conversion presets are managed through an intuitive web interface, and are instantly accessible from any licensed DREAM system. The DREAM operator simply "points" at the desired audio, and then selects a contact and outgoing file format. Virtual Studio Runner can also send audio directly to any networked Pyxis system, allowing DREAM operators to easily merge their mixed audio with picture.

The Virtual Studio Runner (VSR) web interface also provides extensive facilities for any internet-enabled PCs or Macs. Users can convert files to/from a wide variety of formats; send emails with file attachments using VSR webmail; upload files to VSR from their PC or Mac; FTP files directly to VSR contacts; create customised workflows with definable permissions and access rules; and view detailed logs of all emails, FTP transfers and uploads.

Virtual Studio Runner also automatically ingests incoming AIFF, WAV, B'WAV, MP3, OMF 1+2, AAF, PT5.0 or AES-31 files, and ingested files become available for insertion directly into DREAM sessions through a simple interface directly on the DREAM surface. Individual in boxes can be configured on a per Studio basis, or globally for facility wide access.

VSR is available in two versions, VSR and VSRxtreme. VSR includes MP3, AIFF and WAV file conversion. VSRxtreme adds OMF, AAF, AES31 and ML4 formats. Each DREAM client requires a license for VSR or VSRxtreme.

FAIRLIGHT
30 YEARS

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