

SWIFT X Series

Digital Signal Processor



Product Introduction

The digital signal processor equipped with a high-performance 32-bit floating-point DSP processor and A/D ~ D/A converter, support for 24bit/48KHz sampling frequency, high quality 8-stage preamplifier circuit, DSP processing bus structure built-in feedback cancellation, echo cancellation, noise suppression, automatic mixing and other audio core algorithms, to restore high-quality sound, with a comprehensive matrix mixing function It supports multiple scene presets, scene saving and other functions, and user-friendly control software interface. Mainly used in a variety of large places, can meet the theatre, concert halls, remote video conferencing, stadiums, churches, conference center, theme parks, public sound reinforcement systems and other aspects of the application needs.

Product Features

- Highly integrated, integrating a variety of traditional Analog audio processing equipment in a Digital audio processor;
- High-performance 32-bit floating-point DSP processor, all-digital processing, fast response to feedback cancellation, echo cancellation, noise suppression and other core algorithms;
- High-performance A/D, D/A converter, 24bit/48KHz sampling frequency, high-quality Analog → Digital, Digital → Analog conversion;
- Up to 16 Analog input channels and 16 Analog output channels, very small distortion and ultra-low background noise;
- Rich interface expansion;
- Humanization, graphical, intuitive and easy-to-operate control software interface;

- Comprehensive matrix mixing functions;
- Scene storage is different from the Analog equipment is one of the most practical and significant features, can store 100 complete scenes, all the scenes can be exported to an external storage device for storage backup, so that the later call at any time.

Functions

- ✧ Comprehensive matrix mixing function, 24bit/48KHz sampling frequency, high performance A/D, D/A converter and 32-bit floating point DSP processor;
- ✧ DSP audio processing, built-in automatic mixing console, including mixing and automatic mixing functions, but also has a mixing component control function; at the same time with AFC, AEC, ANS module;
- ✧ Inputs per channel: Preamplifier, Generator, Expander, Compressor, Auto Gain, 5-band parametric EQ;
- ✧ Outputs per channel: delay, crossover, limiter, 31-band graphic EQ;
- ✧ Display shows the IP address;
- ✧ Chinese name can be set independently for each channel;
- ✧ Test signal generator, sine wave, pink noise, white noise, frequency and level magnitude selectable;
- ✧ Input phase switch, mute switch, phantom power switch;
- ✧ Output mute switch, phase switch per channel;
- ✧ Flexible switching between Chinese, Traditional and English languages;
- ✧ One-click display of all function modules;
- ✧ Storing Chinese help document and software with the machine;
- ✧ Central control code generated in the control software; power failure automatic protection memory function; one-key reset function;
- ✧ Channel copy, paste function;
- ✧ The same host allows 10 users to manage, the user name can be set to Chinese;
- ✧ Device name can be modified, Chinese name is allowed;
- ✧ Editable preset mode, new, delete, modify, one-key initialization, preset mode can be stored to computer and one-key recovery;

- ✧ With camera tracking function, can independently adjust the preset position of a camera, compatible with VISCA, PELCO-D, PELCO-P three control protocols, support for custom commands;
- ✧ Convenient and fast web control: Built-in web controller for fast operation on Windows, macOS, Linux, Android, iOS and other platforms;
- ✧ Ethernet multi-purpose data transmission and control port, can support real-time management of single and multiple devices;
- ✧ Intuitive image, simple and easy to understand the graphical software control interface, for customers to bring fast, real-time operating experience;
- ✧ The device does not need a disc, comes with installation software, a device for a software version, to solve the troubles caused by the loss of the installation disc and the confusion of multiple software versions;
- ✧ Extendable USB interface, support USB music playback and recording function;
- ✧ Configuration of bi-directional RS232 interface, RS485 interface, standard Ethernet control interface, 4-channel programmable GPIO control interface (customisable inputs and outputs), level support for external inputs 3.3 ~ 24V;
- ✧ Support 8 groups of scene presets, scene increase, save, delete and other functions;
- ✧ Intuitive, graphical software control interface, works on Windows XP, 7, 8, 10, 11, etc..

Specification

Number of Analog Input Channels	8/16
Number of Analog Output Channels	8/16
Number of 485 serial interfaces	1
Number of GPIO interfaces	4, freely configurable inputs and outputs
Number of RJ45 interfaces	1
Sample Rate & Quantization Bits	48KHz@24bit
Preamplification	42dB
Phantom Power	48V

Frequency Response	20Hz~20KHz,±0.2dB
THD+N	≤0.003%@1kHz,4dBu
Analog to Digital Dynamic Range (A-weight)	120dB
Digital to Analog Dynamic Range (A-weight)	114dB
Input Impedance (Balanced)	20kΩ
Output Impedance (Balanced)	100Ω
EIN (A-weight)	≤-125dBu
Channel Isolation	100dB@1KHz,4dBu
Common mode rejection	70dB@50Hz
Signal-to-Noise Ratio	108dB
Maximum Input Level	18dBu
Maximum Output Level	18dBu
Background Noise	-90dBu
Operating Power Supply	DC 12V/2A
Power Consumption	<15W
Operating Temperature	0-40℃
Operating Humidity	10%~90% No condensation
Product Weight	2.1KG
Product Size	482x206x44mm
Package Weight	2.5KG
Package Size	590×430×110mm