



USB-2020

Features

- USB 1.1, 12MHz full speed, fully compliant with USB 2.0 specification
- 16-Bit Delta-Sigma ADC and DAC
- Driving Headphone and Passive Speaker Directly
- Built-in Condenser Microphone Bias
- Volume and Mute Control
- Auto switching USB/external power
- DIN-Rail Mounting



Introduction

The USB-2020 is a USB interface audio device, supports 32, 44.1 and 48 kHz, 8 or 16 bits stereo audio output, and 8, 10.025, 16, 22.05, 32, 44.1, and 48 kHz, 8 or 16 bits stereo microphone input. The USB -2020 supports Plug-and Play in Windows 2000/XP/Vista/7/8/10 and Linux OS. XPAC-8000 already built-in USB-2020 driver.

Applications

- Audio Speaker
- Audio Monitor
- Voice System
- External Sound Card

Specifications

| Audio Output | |
|----------------------------|--|
| Output Channels | Mono, Stereo(L + R) |
| Resolution | 8 bits, 16 bits |
| Sampling Frequency | 32, 44.1, 48 kHz |
| THD+N | < 0.02% (0 dB), < 3% (-60dB) |
| Dynamic Range | > 85 dB |
| SNR(Signal to noise ratio) | > 87 dB |
| Channel Separation | > 85 dB |
| Output Voltage | 3 Vrms |
| Output Current (max) | 30 mA |
| Audio Input | |
| Input Channels | Mono, Stereo(L + R) |
| Resolution | 8 bits, 16 bits |
| Sampling Frequency | 8, 11.025, 16, 22.05, 32, 44.1, 48 kHz |
| THD+N | <0.1% (0 dB) |
| Dynamic Range | > 80 dB |
| SNR(Signal to noise ratio) | > 80 dB |
| Channel Separation | > 78 dB |
| Input Voltage (max) | 1.4 Vrms |
| Input Impedance | 10k Ohm |
| Condenser Microphone Bias | Yes |

| Interface | |
|---|-----------------------------|
| USB 1.1, 12MHz full-speed, fully compliant with USB 2.0 specification | |
| HID volume up, volume down and Mute buttons | |
| 3.5mm stereo jack line-out and 3.5mm stereo jack mic-in | |
| External power terminal block | |
| LED Display | |
| 1 LED as Power indicator | |
| Power | |
| External Power Input Voltage | +10 ~ +30 VDC |
| Power Consumption | 1 W(standby)/1.8 W(max.) |
| Auto Switching USB/External Power | |
| Dimensions | |
| Case | Plastic |
| Flammability | UL 94V-0 materials |
| Dimensions (W x H x D) | 33 mm x 107 mm x 78 mm |
| Installation | DIN-Rail |
| Environment | |
| Operating Temperature | -25 to +75°C |
| Storage Temperature | -40 to +80°C |
| Humidity | 10 ~ 90% RH, non-condensing |

Ordering Information

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|--------------------|-------------------------|
| USB-2020 CR | USB Audio Device (RoHS) |
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Ordering Information

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|--------------|---|
| USB-2020 CR | 24 VDC/1.04 A, 25 W Power Supply with DIN-Rail Mounting |
| MDR-20-24 CR | 24 VDC/1 A, 24 W Power Supply with DIN-Rail Mounting |
| GPSU06U-6 CR | 24 VDC/0.25 A, 6 W Power Supply |