Globalmediapro Fantail HA-U1 USB to Analog Audio Converter



Operation Manual

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1. INTRODUCTION

The Audio Center is designed to allow multiple audio sources to be controlled, switched and output to a variety of audio equipment. With its 3 audio inputs and 2 audio outputs(including a 6.3mm headphone output) you can integrate and convert USB/Line in audio source to LPCM 2CH output synchronously to Line out and 6.3mm headphone.

2. APPLICATIONS

- Multiple input/output Audio Center
- PC/Mac USB audio input support
- Show event audio set up
- Home theater
- Educational/Lecture presentation

• 3. PACKAGE CONTENTS

- 1 x Audio Center
- 1 x 5V DC Power Adaptor
- 1 x 6.3mm to 3.5mm Jack
- 1 x 3.5mm to D-sub 9 pin cable
- Operational Manual

4. SYSTEM REQUIREMENTS

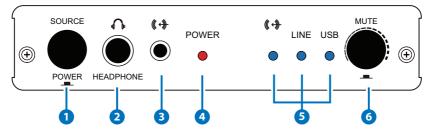
Input audio source equipment such as PC (USB), DVD player, MP3 and ...etc. with output active speakers, amplifier or headphones.

5. FEATURES

- Supports Digital to Analog audio Conversion (DAC)
- Supports USB sampling rate up to 192kHz
- Synchronous output sound on both Line out and 6.3mm headphone
- Supports RS-232 controls
- Elegant design and easy to install/using
- Total Harmonic Distortion (THD): Less than 100dB (-20dBFs)
- Volume contol of analog and headphone outputs
- Direct power and mute button on unit
- Headphone output fades in after system is muted
- 6.3mm headphone output (3.5mm mini-jack adaptor supplied)

6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel



1 POWER/SOURCE Select:

Press the wheel to turn on the device or to set it to standby mode. Turn the wheel Left/Right to select input audio source (3.5mm Linelevel/Line in/USB), the LED will illuminate accordingly with selected input audio source.

2 6.3mm HEADPHONE Output:

Connect to 6.3mm professional headphone set for user to enjoy the individual professinal audio sound.

3.5mm Line-level input:

Connect 3.5mm mini-jack cable to any audio equipment for stereo input audio signal.

4 Power LED:

LED will illuminate when the Power is switched ON.

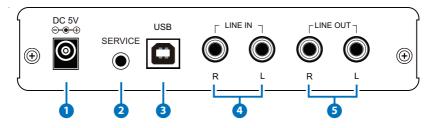
5 Input LED indicator:

The LED will illuminate according with selected input source.

6 Mute/Volume control:

Turn the wheel to adjust the volume levels. Press the wheel to Mute the audio, all the input audio LED indicator will turn off automatically. Turn the wheel Left/Right to un-mute the audio, input audio LED indicator will illuminate to the last selection.

6.2 Rear Panel



1 DC 5V:

Plug the 5V DC power supply into the unit and connect the adaptor to an AC outlet.

2 RS-232:

Connect 3.5mm D-Sub 9 pin adaptor cable to PC/Notebook for RS-232 control.

3 USB IN:

Connect to a PC/MAC source for USB audio signal input or firmware update.

4 Line IN:

Connect the L/R IN to an analog stereo input source such as CD player or media player.

5 Line OUT:

Connect the L/R OUT to amplifier or active speakers with RCA jack cables.

7. RS-232 CONTROL

7.1 RS-232 Protocol

| HA-U1 | | |
|-------|------------|--|
| PIN | Assignment | |
| 1 | NC | |
| 2 | Tx | |
| 3 | Rx | |
| 4 | NC | |
| 5 | GND | |
| 6 | NC | |
| 7 | NC | |
| 8 | NC | |
| 9 | NC | |

| Remote | Control |
|--------|------------|
| PIN | Assignment |
| 1 | NC |
| 2 | Rx |
| 3 | Tx |
| 4 | NC |
| 5 | GND |
| 6 | NC |
| 7 | NC |
| 8 | NC |
| 9 | NC |

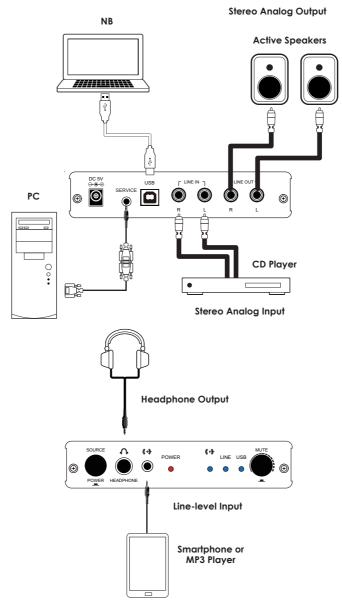
Baud Rate: 19200 bps Data bit: 8-bits Parity: None Stop Bit: 1

7.2 RS-232 Command

| Command | Description |
|--------------|------------------------|
| PORT 00 | Switch Front In |
| PORT 01 | Switch Line In |
| PORT 02 | Switch USB In |
| VOL 00 | Volume controller |
| VOL -(01160) | Volume controller |
| POWER 00 | Power off |
| POWER 01 | Power on |
| MUTE 00 | Mute off |
| MUTE 01 | Mute on |
| FIX 00 | LINE Out volume levels |
| FIX 01 | LINE Out fix level |
| ME 03 | Reset to default |
| HPR (0005) | ΗΡR 00: 16Ω |
| | HPR 01: 32Ω |
| | HPR 02: 64Ω |
| | HPR 03: 200Ω |
| | ΗΡR 04: 300Ω |
| | HPR 05: 600Ω |

| | Display all available commands |
|------|--|
| ? | Ext: |
| | |
| | Support UART commands as list |
| | commands : Description |
| | PORT 00: Front In |
| | PORT 01: Line In |
| | PORT 02: USB In |
| | POWER 00: POWER OFF |
| | POWER 01: POWER ON |
| | MUTE 00: MUTE OFF |
| | MUTE 01: MUTE ON |
| | FIX 00: FIX OFF |
| | FIX 01: FIX ON |
| | HPR 00: 16_OHM |
| | HPR 01: 32_OHM |
| | HPR 02: 64_OHM |
| | HPR 03: 200_OHM |
| | HPR 04: 300_OHM |
| | HPR 05: 600_OHM |
| | VOL 00: VOL xxdB |
| | VOL -(01160): VOL -xxdB |
| | ME 03: Reset to default |
| | |
| | INFO : Display the current status and F/W |
| | version |
| | ?: Display all available commands |
| INFO | Display the current status and F/W version |

8. CONNECTION DIAGRAM



9. SPECIFICATIONS

| Input port | 1 x 3.5Ø Line in, 1 x R/L RCA, 1 x USB (Type B), 1 x 3.5mm 9pin (RS-232), |
|---------------------------|--|
| Output port | 1 x L/R (Analog Stereo 2RCA), 1 x 6.3mm Headphone |
| Audio Input/Output | LPCM 2CH |
| Stereo Input/Output Level | 2 Vrms ± 0.2 |
| ESD Protection | Human body model: ±8kV (air-gap discharge) ±4kV (contact discharge) |
| Power Supply | 5V/ 2.6A DC (US/EU standards, CE/FCC/UL certified) |
| Dimensions | 145mm(W) x 113mm(D) x 30mm(H) |
| Weight | g |
| Chassis Material | Aluminum |
| Silkscreen Color | Black |
| Operating Temperature | 0°C ~ 40°C |
| Storage Temperature | -20°C ~ 60°C / -4 °F ~ 140 °F |
| Relative Humidity | 20 ~ 90% RH (non-condensing) |
| Power Consumption | 8.5W |