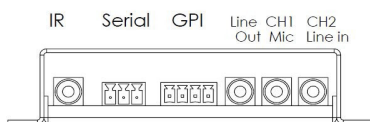




CM-800 and CM-800S

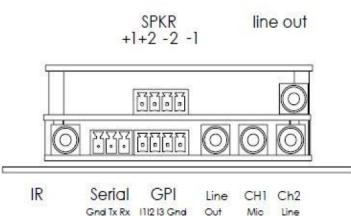
Networked Audio



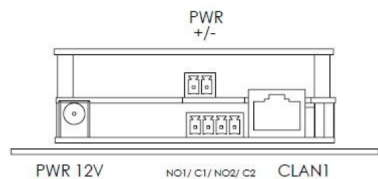
CM-800 Front View



CM-800 Rear View



CM-800S Front View



CM-800S Rear View

The CM-800 is a networked audio decoder that accepts streaming audio input (raw PCM) and delivers line level audio output. The primary purpose of the CM-800 is to provide connectivity between the Calypso **Conductor** IP-based paging system and standard 70v amplifiers and speakers frequently used to bring audio messaging to school common and outdoor areas. As such, the CM-800 converts 8KHz-sampled audio to line level audio output, suitable for use as an input to standard, 3rd party amplifiers.

In addition, the CM-800 provides serial, IR, GPI and GPO (relays) to support network-based 3rd party device control. In addition, an optional 30W amplifier module for driving speakers directly turns the CM-800 into the CM-800S, capable of driving up to four 8ohm speakers, conveniently bringing IP paging to small common areas and shared office spaces.

When not streaming audio the CM-800 mixes, samples and plays line level audio from two inputs at 48kHz. A unique configuration feature of the CM-800 is the ability to detect audio at the inputs and automatically stream this audio over the network. Accordingly the unit can be used to convert a standard analog paging system into an IP-based, streaming solution.

As with most Calypso products, CM-800 and CM-800S configuration and setup is conveniently done through any standard browser connected to the CM-800 directly or over a network.

Call 888-381-9646 or visit www.calypsosystems.com for more information on how the CM-800 and CM-800S networked audio blocks can help deliver effective IP Paging solutions.

CM-800 / CM-800S - Specifications

Networked Audio

Hardware:

- Case dimensions: 3.84 x 2.5 x .913 (CM-800), 3.84 x 2.5 x 1.2 (CM-800S)
- Ethernet jacks: RJ45 (1)
- Audio Input plug: 3.5mm (tip, ring, sleeve)
- Mic/Line Input plug: 3.5mm (tip, ring, sleeve)
- Amplifier Line Out plug: 3.5mm (tip, ring, sleeve)
- General purpose relay outputs (2): 4 position, 3.81 mm terminal block header
- General purpose inputs (3): 4 position , 3.81mm terminal block header
- IR output plug: 3.5mm
- Amplifier Speaker Out connector (CM-800S): 4 position, 3.81mm terminal block header
- Serial COM Port: 3 position, 3.81mm terminal block header

Electrical:

- Micro-controller with flash based memory
 - 64 pin micro-controller with built in DMA operating at 8MHz
- 4 Mbit external flash memory for non-volatile storage of the built-in web pages
- One 10/100 based Ethernet port
 - LAN 1 provides the necessary signals for network communications
- Error and operational Status LED control
- CODEC for playing and streaming audio
- Microphone/Line input
 - Microphone differential input (channel 1)
 - Sleeve (negative), Tip (positive), Ring (not used)
 - Line input (channel 2) unbalanced stereo
 - Sleeve – Ground, Tip – Left line in, Ring – Right line in
- Stereo mono unbalanced/balanced audio output
 - Vout max. 5Vpp stereo output
 - Sleeve – Ground, Tip – Left channel (or mono +), Ring – Right channel (or mono -)
- IR output
 - Sleeve – Ground, Tip - IR output driver, Ring (not used)
- Serial receive/transmit communications
 - Standard RS232 serial communications port
 - Pin 1, Receive (RX1)
 - Pin 2, Transmit (TX1)
 - Pin 3, Ground (GND via 5 ohm resistor) (hard ground via jumper 5 pins 1 and 2)
- Two general purpose outputs (24V@0.5A max)
 - Relay 2 can be jumper configured for +12V in/out using J4 and J6
 - Pin 1, Relay 1 - Normally open (+12V in/out via J4)
 - Pin 2, Relay 1 - Common (GND via J6)
 - Pin 3, Relay 2 - Normally open
 - Pin 4, Relay 2 - Common
- Three general purpose inputs
 - Pin 1, General purpose input 1 (optional rotary encoder input)
 - Pin 2, General purpose input 2 (optional rotary encoder input)
 - Pin 3, General purpose input 3 and rotary encoder button
 - Pin 4, Ground

Optional 30W amplifier module (CM-800S)

- Two test jumpers
 - J1, All call streaming
 - J2, Play audio tone (next built in tone played)
- 12VDC@3.5A Power Adapter
 - Current and short circuit protected
- Speaker Connector (Mono, both SPKR 1 and 2 have the same output)
 - Pin 1, + SPKR 1
 - Pin 2, + SPKR 2
 - Pin 3, - SPKR 2
 - Pin 4, - SPKR 1