

swing

PORTABLE ISDN AUDIOCODEC



E@sy© Family
Enhanced Automation System
 WWR World Wide Ready series
*The WWR equipment ensures connectivity to the
 different world-wide communication networks*

Now with Layer III and split modes



PORTABLE:
 • **ISDN AUDIOCODEC**
 • **MICROPHONE MIXER**
 • **TELEPHONE HYBRID**
WITH FREQUENCY
EXTENDER

The SWING is the newest AEQ Portable Audiocodec. It's Worldwide Terminal Adapter easily connects with the U interface compatible with ANSI (National-1) for the USA and the S interface compatible with ETSI (EURO ISDN) for the rest of the world. This function requires no extra expense. Both options are selectable in the Set Up Menu.

The built-in Digital Telephone Hybrid has the unique capability to connect to the analog line simultaneously with the ISDN connection.

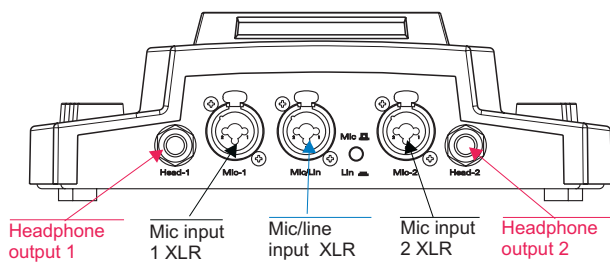
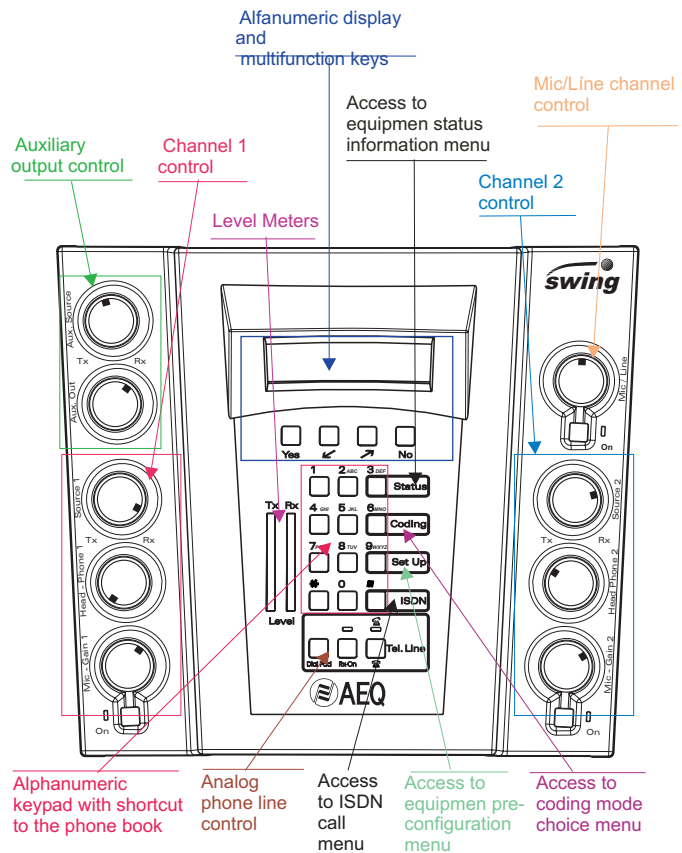
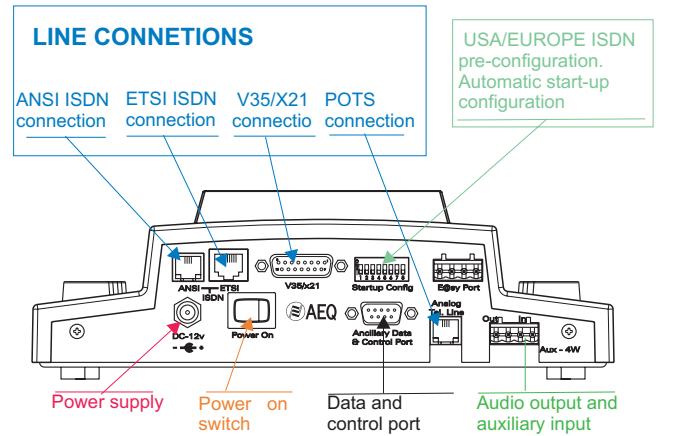
Ideal for a back up connection or to do a remote transmission where ISDN lines are not available. The Digital Hybrid has a Frequency Extender and Echo Cancellation capabilities.

The Swing also has an X21/V35 connection for use on point-to-point digital lines.

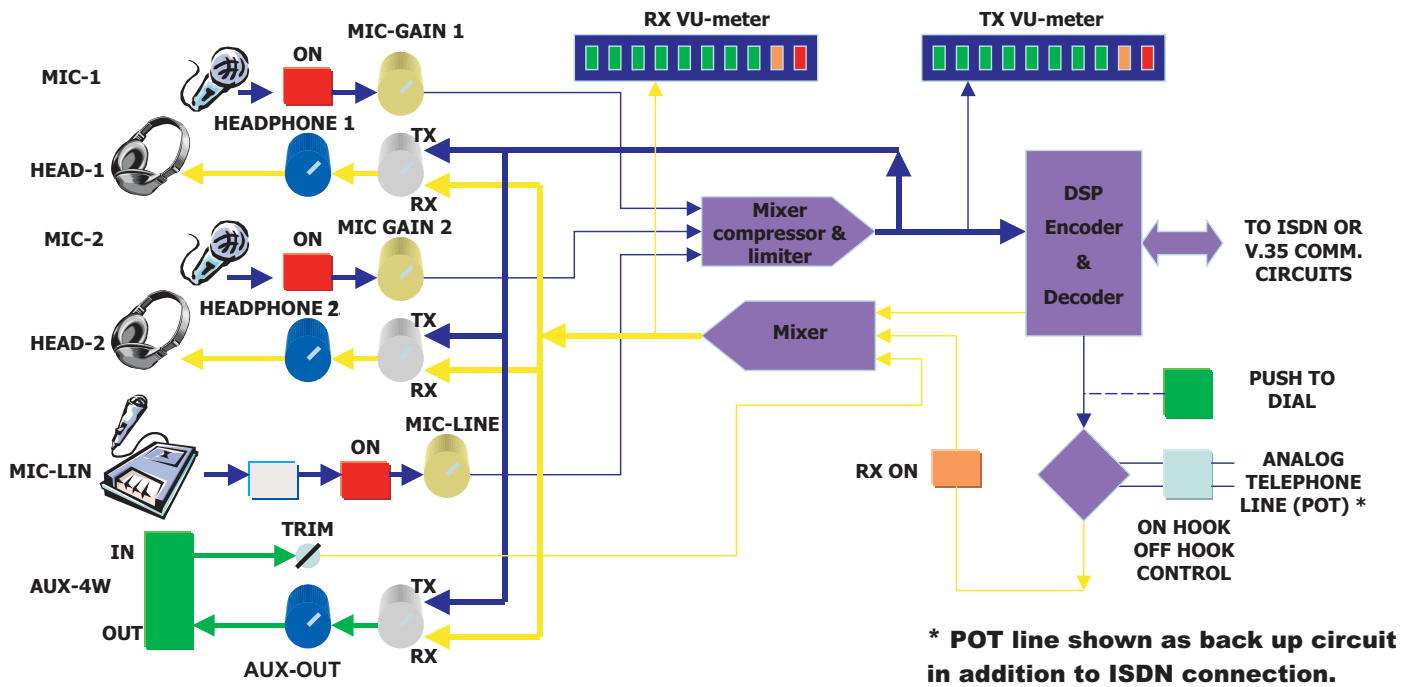
The Microphone Mixer features two headphones with separate level control and an easy-to-use 4-Wire connector.

BENEFITS AND SPECIAL FEATURES

- The SWING is the ideal remote broadcast unit. With its flexible design, you may use the ISDN audio codec to send high quality audio through digital lines. When ISDN lines are not available, you may activate the digital telephone hybrid with the built-in frequency extender and use the analog phone lines. When both type of lines are available, you can use simultaneously the ISDN and pots lines. Your On-Air team can easily access the three-microphone input mixer.
- The Audio Codec is a Mono unit that works at 64 or 128 kpbs. Its Worldwide Terminal Adapter easily connects with the U Interface compatible with ANSI (National-1) for the USA and the S interface compatible with ETSI (EURO ISDN) for the rest of the world. This function requires no extra expense. Both options are selectable in the Set Up Menu. Also, offers a V.35/X.21 interface for point-to-point connections.
- The Digital Telephone Hybrid features a frequency extender for analog phone line connections.
- Ease of use by non-technical staff: Can be controlled by software (even in remote mode from the station), and has pre-defined automatic start-up configurations, simplified user menu with the most usual functions, phone book with shortcut.
- Automatic elimination of send signal on the return feed; adaptive cancellation of return echo ideal for live On Air phone calls.
- Anti-clipping limiter, before digital conversion, avoids audio overloads.
- Features an internal Digital Dynamic Audio Processor providing constant audio levels and clear audio without overloads. It is controlled and configurable by software.
- Adjustable data channel allows independent data speed at Tx and Rx according to audio or remote locations needs.
- Member of the **E@sy** family. From a multi-point network, a suite of Swing and other **E@sy** Family Equipment can be controlled, making a system of first-class features and very powerful functions.



Audio block diagram.



BACK PANEL



FRONT PANEL

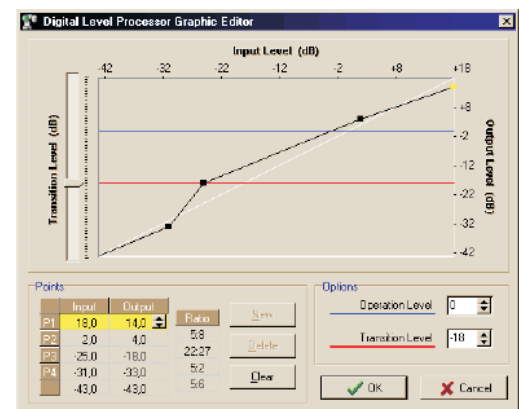


ISDN CODING MODES AND THEIR CHARACTERISTICS

Coding mode	Baud rate (Kbps)	Bandwidth (KHz)	Delay	Data channel
G.711 Ley A (Europe, ...)	64	3.5	Low	NOT
G.711 Ley μ (USA, Japan, ...)	64	3.5	Low	NOT
G.722 statistical	64	7	Low	NOT
G.722 H.221/H.242	64	7	Low	YES
AEQ LD-2	128	15	Low	NOT
ISO/MPEG LII mono 24/32/48 KHz	64	11/10,5/10	High	YES
ISO/MPEG LIII mono 32/48 KHz	64	15	Very High	NOT
Cod. ISO/MPEG LIII mono 32/48 KHz Dec. G.722 statistical	64	15 7	Very High Low	NOT
ISO/MPEG LII mono 48 KHz IMUX	128	20	High	YES

PLAIN OLD TELEPHONE SYSTEM (POTS)

Normal mode	
AEQ extended mode including adaptative remote echo canceller	Compatible with: Th02 Ex MK II, TLE 02, TLE 02D, MPAC 02



The unit comes pre-configured for immediate use in each geographic area. In addition, a corporate phone book can be loaded, the dynamics can be adapted to the type of microphones used at the station and it can be configured for automatic dialing with pre-defined coding modes for sending data to a remote computer. It can also be remotely controlled when used by non-technical staff.



TECHNICAL

Communication interfaces.

ISDN.

- "S" interface in RJ-45 connector.
- "U" interface in RJ-11 connector.

Point-to-Point.

V.35 / X.21 interface in DB-15 female connector. 64 or 128kbps.

Analog telephone interface.

RJ-11 connector.

ISDN protocols.

- Euro ISDN
- NATIONAL-1

Analog inputs and outputs

Main inputs MIC-1, MIC-2 and MIC/LINE.

- Transformer balanced, with RF filters, female XLR-3.
- Input impedance: > 6 kOhms.
- Maximum level (MIC): - 25 dBv.
- Nominal level (MIC): -60 dBv.
- Maximum level (LINE): + 22 dBv.
- Nominal level (LINE): 0 dBv.
- 16-bit Sigma-Delta A/D converters.

Auxiliary 4W input.

- Transformer balanced, with RF filters.
- Input impedance: > 6 kOhms.
- Maximum level (LINE): + 22 dBv.
- Nominal level (LINE): 0 dBv.
- 16-bit Sigma-Delta A/D converters.

Auxiliary 4W output.

- Transformer balanced.
- Output impedance: < 50 Ohms.
- Maximum level: + 22 dBm.
- 16-bit Sigma-Delta D/A converters.

Headphone outputs Head-1 and Head- 2.

- 1/4" jack, 150 mW., for headphones > 200 Ohms..

Telephone hybrid.

- Nominal TX level : -12dBv
- Nominal RX level : -7dBv
- Local echo canceller
- Remote echo canceller for ISDN G711

Dynamics Control

- Hardware limiter before the A/D conversion.
- SOFTWARE DLP after A/D conversion.

Ancilliary Data Port.

- RS232 async.115200 bauds, with flow control.

Remote control.

- E@sy RS422 and RS-232 interface for PC remote control.

Power supply.

- 12 V DC 600 mA. External auto-range supply, from 90 to 250 VAC, 50/60Hz,. Includes NimH rechargeable batteries with UPS effect, operative for 1 hour without AC input.

Dimensions and Weight:

Unit:

Width: 9.45", 24 cm.
Depth: 8.27", 21 cm.
Height: 3.15", 8 cm.
Weight: 3.3 Pounds. 1.500 grams

Power Supply:

Width: 3.5", 9 cm.
Depth: 5", 13 cm.
Height: 2.75", 7 cm.
Weight: 1.5 Pounds. 675 grams

Specifications subject to possible changes with no prior notice.