SUMMING/DISTRIBUTING DIGITAL AUDIO MATRIX

E@sy © Family
Enhanced Automation System

WWR World Wide Ready series.
The WWR equipment ensures connectivity to the different world-wide communication networks.

AEQ

impact /DC caddy /DC E@sy/DC

SUMMING/DISTRIBUTING DIGITAL AUDIO MATRIX

The system is configured as a summing/distributing digital audio matrix with up to 60x60 AES-EBU (AES-3) stereo digital circuits, (120 x 120 mono), each block. Several blocks can be grouped together to achieve greater dimensions.

Each AEQ IMPACT basic module has 12 AES-EBU inputs and outputs. Up to 5 AEQ IMPACTS can be included per system to reach its maximum block capacity. Several E@sy blocks can be grouped together to reach dimensions that exceed this maximum.

Through the different E@sy software options, it achieves full functionality appropriate to each application, whether individually or in combination with other E@sy units.

A number of AEQ CADDY múltiple AD & DA converters may be added to transform AES - EBU inputs and outputs into analog ones.

For full operating security in the face of electrical outages or malfunctions, the IMPACT DC and CADDY DC versions are available, which receive DC power from the E@sy PS dual power supply, which will provide power to a full IMPACT-CADDY block (10 Units).

BENEFITS AND SPECIAL FEATURES

- Modular; 12 inputs and 12 outputs per basic module.
- Regulation of input and output level at ± 12 dB.
- All inputs can be summed on each and every one of the outputs.
- Each input can be distributed to each and every one of the outputs.
- Digital time division multiplexing process with external A/D and D/A conversion for those circuits that need it.
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- Sampling rate converter (SRC) at each input, accepting between 16 and 96 Khz.
- External A/D D/A converter module .
- Through the E@sy (Enhanced Automation System) port up to 128 AEQ E@sy products (RANGER Multiplexer, COURSE Multicodec, EAGLE Audiocodec and others, where of 100 can be IMPACT blocks) can be controlled from one or several PC's.
- Integration with other units of the E@sy family through software control , performing multiplex console functions , ISDN multiconferencing system functions, intercom matrix functions, and others that respond to specific needs.
- Integration with Mar4Suite software, enabling automatic and remote controlled Broadcast sessions and distributed controls for the signal routing in a Production Center for Radio Programs.
- Time division multiplexing using the most advanced digital technologie at an affordable price.

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IMPACT control and configuration can be done from a PC connected to the E@sy network, in which a series of applications described in additional catalogues are running.

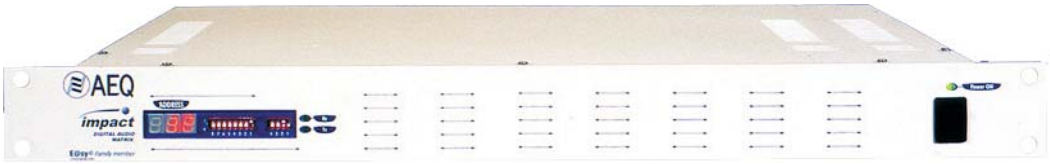
IMPACT STANDARD, for simple and direct control of up to one Matrix block, from one or several workstations. It is offered at no charge with the Matrix.

IMPACT PLUS, for users who need to manage partial views of Matrixes with a maximum of one block.

SYSTEL 6000, for users who require the multiplex console function or ISDN multiconferencing system.

CODEC SHARE, to route audio from a codec bank between studios.

SPECIAL, which cover additional needs, such as: Multi-block matrixes, or matrixes linked to Automation Systems or Databases.



IMPACT 40
Matrix 12 Stereo Digital Inputs by 12 Stereo Digital Outputs. Powered in AC, internal power supply autorange 90-250VAC, 50-60Hz.

IMPACT DC
Similar to IMPACT 40.Powered in DC, through E@sy PS.

E@SY PS
Impact DC System redundant central power supply, monitored through the E@sy bus. Valid for up to 10 units IMPACT DC or CADDY DC (Includes control software IMPACT PS).

CADDY
A/D D/A Multiple Converter: 24 Mono Analog Inputs to 12 Stereo Digital Outputs and 12 Stereo Digital Inputs to 24 Analog Outputs. Powered in AC. Autorange power supply 90-250VAC, 50-60Hz.

CADDY DC
Similar to CADDY. Powered in DC, through the redundant external power supply E@sy PS

IMPACT-CADDY ACCESSORIES

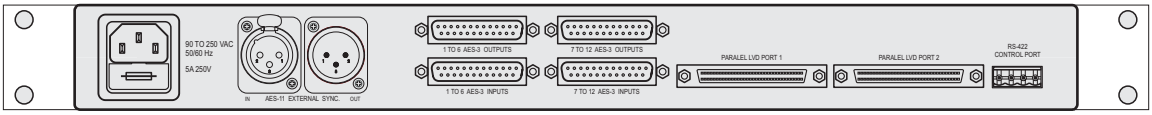
DIO 6ST
Connection cable Impact-Caddy DB25 male-DB 25 female, 6 outputs to 6 digital inputs, 1 m. Max. 4 for each pair Impact-Caddy.

DI 6ST
Connection cable DB25 male for digital inputs to Impact or Caddy, 6 pairs 2 meters, ends on cut cable without termination. Max. 2 for each Impact or Caddy.

DO 6ST
Connection cable DB25 female for digital outputs from Impact or Caddy, 6 pairs 2 meters, ends on cut cable without termination. Max. 2 for each Impact or Caddy.

AI 12M
Connection cable DB25 male for analog inputs to Caddy, 12 pairs 2 meters, ends on cut cable without termination. Max. 2 for each Caddy.

AO 12M
Connection Cable DB25 female for analog outputs from Caddy, 12 pairs 2 meters, ends on cut cable without termination. Max. 2 for each Caddy.



TECHNICAL FEATURES

Of the System

- Maximum capacity by block

120 X 120- 20Hz-20 KHz analog mono audios
60 X 60 20Hz -20KHz stereo audios
60 X 60 AES-EBU digital stereo audios

This capacity can be surpassed by daisy chaining several IMPACT blocks together and controlling them jointly through the E@sy software.

Of each AEQ IMPACT basic module

- **12 physical AES-EBU (AES-3) inputs.**
- **32 - 96KHz SRC (sampling rate converter) at each input.**
- **Transformer at each input.**
- **12 physical AES-EBU (AES-3) outputs.**
- **fs (internal sampling rate): 48 Khz.**
- **24 bits per sample.**
- **Transfer frequency in the bus: 6,144 Mhz ; 24 bits.**
- **Typical dynamic range 128dB**
- **Total harmonic distortion + noise @1 KHz < - 117dB.**
- **Internal or external synchronism (AES-11) with bypass.**
- **High-speed LVD parallel bus interface.**
- **FLASH-EPROM technology to update and configure the unit with no need to open it, or even from a distance.**
- **E@sy (Enhanced Audio System): RS 422 multipoint control at 38,400 bauds.**
- **DIP-SWITCH addressing**
- **Front, 3-character address display.**
- **Input connectors (2): DB-25 female.**
- **Output connectors (2): DB-25 male.Sync connectors: XLR male and female.**
- **LVD bus connectors (2): 68 contacts, female, micro D type (SCSI-2/3).**
- **E@sy RS422 control connector: 4 contacts, "Hartmann" type.**
- **Power requirements: 85-264V AC 50/60Hz, 25W.**
- **Format: one 19" rack unit (482.6 x 44.5 mm).**

Of AEQ CADDY. See CADDY catalogue.

Of AEQ IMPACT DC

Power supply connectors: Neutrik Speak-on, 4 contacts.
Supply voltage: 48 v. DC.

Of AEQ CADDY DC

Power supply connectors: Neutrik Speak-on, 4 contacts.
Supply voltage: 48 v. DC.

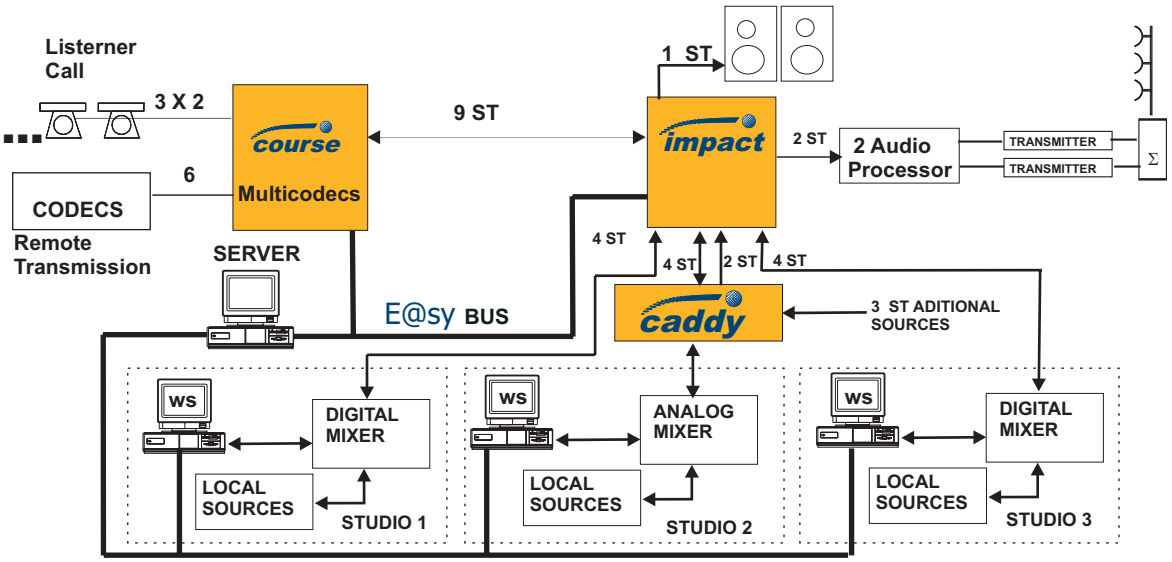
Of AEQ E@sy PS

Supply voltage: 90-240 volts AC
Hot-removal autonomous power supplies. Power: 2 X 300 W
Format: Two 19" rack units (482.6 x 89 mm).
Supervision: Through E@sy software, of the internal power supply (+5v. and +-15 v) of each IMPACT DC and each CADDY DC connected, as well as of the two general E@sy PS power supplies.

APLICATIONS

Ed.:12-04

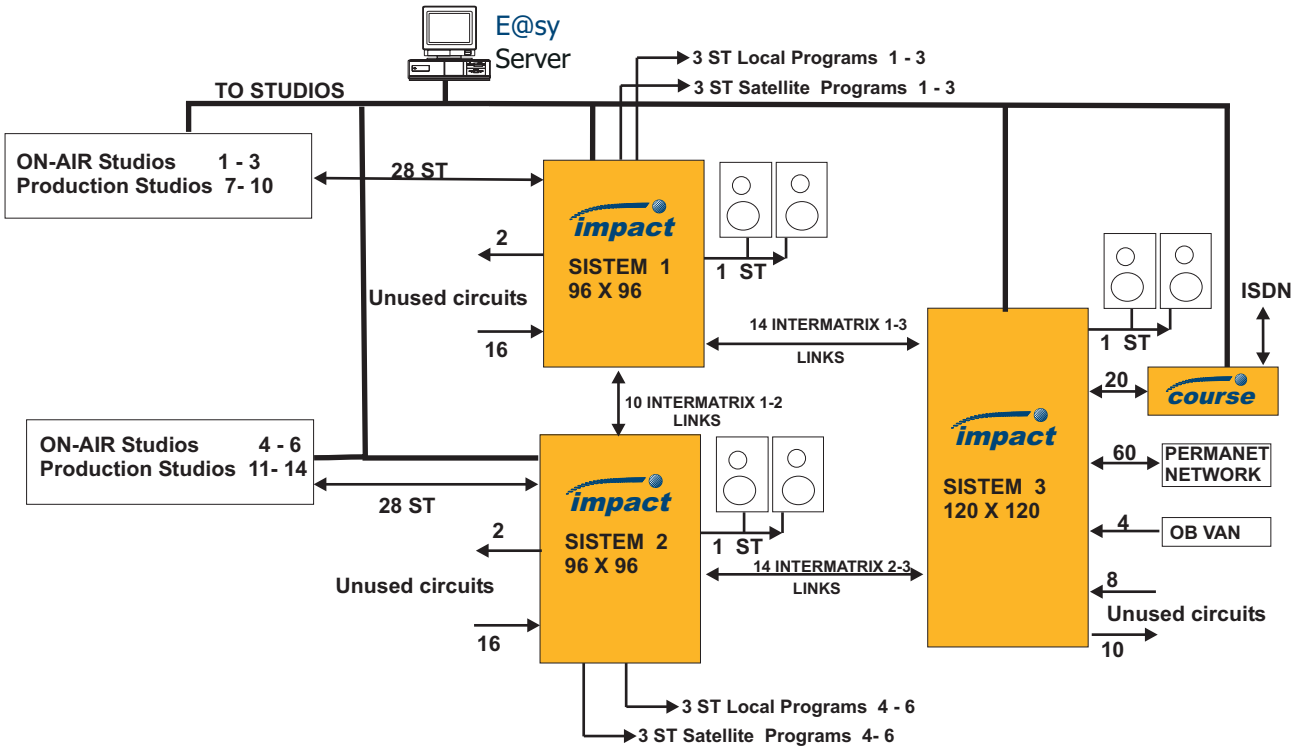
IMPACT matrix combined with other E@sy equipment items for three-studio radio station.



This configuration is set up with two IMPACT modules, one CADDY and a COURSE with nine dual boards.

The IMPACT digital audio matrix handles the audio signals between the consoles in the three studios and outside the radio station. The CADDY converter adapts the analog audio signals so that they can be connected to the IMPACT matrix.
The COURSE multicodec receives the outside lines through the ISDN. Simultaneously, it does a talk show for ON AIR 1, a sports multiplex for ON AIR 2, and records a news report from a correspondent for PRODUCTION.
The IIMPACT matrix and the COURSE multicodec are controlled from all of the studios through the E@sy software.

Grouping of three IMPACT systems for a 14-studio radio station with six local programs and six satellite programs, and a permanent network of sixty associated stations.



Total system size: 236 X 236 (in mono lines). This configuration leaves free inputs and outputs in all the matrixes.