



O.B.Box Genius 08

Portable Television Studio

DV, Component YUV, Super VHS (Y/C), Composite

Genius O.B. BOX 08 Portable TV Studio is the evolution of the Genius O.B. BOX MK2 previous model from which it takes a part of the apparatuses, whereas other apparatuses have been replaced with more recent versions and higher performances.

In comparison with MK2 model, the new Genius O.B. BOX 08 moreover changes the design of container that allowed to reduce further the dimensions of it.

Genius O.B. BOX 08, even though it is a very reduced dimension TV Studio, is complete of all the necessary equipment for television production, included an intercom system.

It can be used either in studio or for external shots and, in this case, it will allow to transport it with facility and rapidity in whichever place of the event, even the most inaccessible.

The heart of the Genius O.B. Box 08 is constituted by a Datavideo SE-800 four channel vision switcher (for digital and analogue video).

Thanks to use of frame memories and TBC it also allows to use television cameras and VCRs with signals asynchronous between them.

This involves a notable acceleration of the startup operations and a saving on the purchase of equipment for synchronization and measurement, avoids moreover the use of specialized technical personnel.

Applications

- live events (sport, art, political, actuality)
- dedicated studio during international TV transmissions (soccer, F1, motorcycling etc ...)
- advertising, television spots, telesales
- documentaries and journalistic reports
- productions of industrial video
- production of video
- shortfilms and full-length film
- interviews and debates
- webcasting transmissions
- videostreaming conferences
- live concerts, realization of musical videoclip
- inaugurations, shows, seminars and congresses
- students, technical and sanitary personnel training
- surgical videos ...
- weddings, fashion parades
- cultural and didactic meetings
- TV shots in cult sites

The creation of new digital video standards, together to wide diffusion of equipment for television shots that have reached together to an extreme compactness a quality video of professional level to extremely approachable costs, has suggested to ELMAN to realize the new one: Genius O.B. Box 08, the O.B. Box of fourth generation able to operate both with the classical analogical video inputs and with the new digital video inputs.

Use of New Digital Cameras

A big advantage in having inserted video digital inputs into the Genius O.B. BOX 08 is given by the possibility to use DV/firewire cameras that, further to be smaller, are able to guarantee images equals or even better than to the old analog professional cameras, but at lower prices.



The inputs of the same cameras can be used in its turn as digital VCRs. Moreover, thanks to installed "3 in 1" JVC SR DVM700 professional VCR it is possible to use material shoted on the following supports: DVD, mini DVD and mini-DV.

List of the apparatus contained in the system

- triple 5.6" LCD TFT Monitor (MARSHALL V-R563P)
- quad 4" LCD TFT MONITOR (ELMAN)
- 2 wires / 4 wires Intercom + audio amplifier and tally (ELMAN)
- compact stereo speaker system with woofer (ELMAN)
- 4x1 Switcher/ 1x6 Distributor (ELMAN)
- 4 channels Audio/Video Mixer SE800 (Datavideo)
- JVC SR-DVM700 three-in-one digital videorecorder incorporating Mini-DV- DVCAM DVD and HARD DISK with various editing and dubbing capabilities
- 12 channels Audio Mixer Behringer XENYX 1202
- AC/DC Power Distribution- Power supply system (ELMAN)
- gooseneck service light

Is provided a protective flightcase container according to the IATA rules.

EQUIPMENT DESCRIPTION

Mixer Datavideo SE-800

The SE-800 is a broadcast quality four inputs digital mixer.

Multi-format inputs and outputs with Analogue/DV format conversion.

Each input can accept: DV (DV25), Components YUV,



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Super VHS (Y/C) or Composite video formats, and convert output to all formats.
The full size control panel includes 30 pre-



programmable keys that let you playback the pre-programmed functions instantly by pressing a single key.

Dual channel TBC with YUV 4:2:2 Frame synchroniser for Composite, S (Y/C) and Component Y.U.V. inputs and outputs.

SE 800 is also equipped with four channel stereo mixer with stereo microphone and earphone connections.

Features

- 4 video inputs. Each input can accept: DV (DV25), Component YUV, Super VHS (Y/C) or Composite video formats, and convert output to all formats.
- Output: DV (DV25), Components (Y.U.V.), S-Video S(Y/C), Video Composite, SDI
- Four channel audio mixer with unbalanced audio stereo inputs (for balanced inputs use BAC-03 option)
- An audio stereo master output and an output for headset
- A microphone audio input
- Colour processor including R.G.B. Correction with white balance and last set-up upon each input.
- Audio video Synchronizer
- 50+ digital effects include: A/B Roll, A/B Dissolve, Chroma Key, Mosaic, PIP, Strobe, Fade and Wipe with soft edge, etc...
- 30 instant Pre-programmable playback function keys
- 2 channels TBC
- 4:2:2 Full screen frame memory. 3,5 Mhz for components (Y.U.V.), S-Video s (Y/C), Composite video inputs and outputs
- SDI overlay to use with SDI output of a character generator

7 LCD TFT Full Colors Monitors: Triple 5.6" and Quadruple 4"

A collapsible support holds seven color panel flat LCD monitors that are all tiltable so one can obtain a perfect contrast vision.

They are light, have a low consumption and don't tire the eyes.

They are compatible with the standards PAL and NTSC (autoswitching).

The three 5.6" monitors (Marshall V-R563P) are used to see respectively: preview output (center), program output (right), video recorder input (left).

Every monitor (960 x 234 pixels) is equipped with 2 inputs and 2 outputs for composite video, has three tally



leds (yellow, red and green) and an embedded color bar generator.

On the frontal panel of each monitor are the following controls: power, colour, hue, brightness, contrast and video1, video2, bars.

The four 4" monitors (ELMAN 4"x4") have 4 input signals and each of them is equipped with tally leds (red) that shows what signal is on air.

Every monitor has an loop through input

Elman 4"x4 monitors (480 x 234 pixels) have the colour, hue and brightness control.

JVC SR-DVM700 three-in-one digital professional video recorder incorporating digital Mini-DV, 250 GB Hard Disk and DVD recorder with various editing and dubbing capabilities.



SR DVM 700 has an input for analog signals too.

- Video recorder on: Mini DV, 250 GB Hard Disk, DVD
- Also capable of playing back DVCAM™ tapes
- DV IEEE 1394 Interface
- Capable to perform editing on H.D.
- Capable to formulate a menu before DVD creation
- Inputs: composite video, YC, DV.
- Outputs: composite video, YC, component, DV

By side of SR DVM700 has been prearranged a lodging for remote control.

Audio Section

The audio signal, coupled with 4 input video, is mixed automatically by SE 800 audio/video mixer during transitions from a channel to another one.

Genius O.B. BOX 08 is also equipped with 12 inputs



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Audio Mixer Behringer of the rising generation: XENYX 1202.

The mixer is mounted on a tip-top support that is locked by a proper bracket during the transport.

Exploitable Inputs in XENYX 1202 are: 4 mono



channels and 2 stereo channels and they can be balanced and unbalanced.

An adapter located on the back of Genius O.B. BOX 08 allows to provide the output general audio in a balanced and unbalanced way.

BEHRINGER XENYX 1202

- 12 inputs and 2 bus with preamps mixer
- Highest quality 12 inputs mixer 2 bus with XENYX mic. preamplifier
- Lowest interference, very high dynamic range
- 2 new XENYX vanguard mic preamplifier
- "British" 3 bands neoclassic EQ for a warm and musical sound

Thanks to use of the most modern circuit techniques, XENYX 1202 mixer is able to reproduce an incomparable warm analog sound.

The channels of microphones are equipped with preamp High-End XENYX Mic, which quality of sound and dynamic is comparable to that of outboard preamp and provide an incredible headroom with 130 dB dynamic spectrum.

With a bandwidth from 10Hz to over 200Hz they allow a crystalline reproduction of various nuances.

AC/DC Power Distribution

On the top part of SE800 mixer is located the apparatus for control energy distribution, the AC/DC Power



Distribution.

On the frontal panel, there are 3 switches: the first is a general differential switch for AC electrical net, the second is an "equipment" switch for the apparatuses installed inside Genius O.B. Box 08 , the third is a switch for "external" equipment outside Genius O.B. Box 08.

Two 5 ampere automatic switches protect the line of power supply of internal and external equipment. A XLR 5 female connector located on the right of frontal panel allows to power directly the gooseneck illumination lamp with flexible arm to light up the control zone of the TV Studio without disturbing the surrounding environment

Power Supply

The total power consumption of Genius O.B. Box 08 is about 220 W (90-240 Vac).

Thanks to the universal power supply it can be used in every area of the world.

Intercom Genius

This apparatus (in the center) has 3 distinct functions: Intercom, Listen Amplifier, Tally.

The first is a 7 channels full/duplex and semi/duplex intercom with return modulation and input for external producer.

The intercom has three 2 wires channels (for the video cameras) and four 4 wires channels for to speak, as an example, with a external producer, recording rooms , external o.b.van, etc...



Listen Amplifier and compact stereo speaker system

Audio/listen amplifier of the TV Studio is located inside the intercom and the volume is adjusted by PROGRAM control.

The compact stereo speaker of the Genius O.B. BOX 08 is performed by a couple of middle-high loudspeakers (the right one and the left one) placed on the top of the three 5.6" monitors and by a woofer for low frequencies located inside, on the back of apparatus.

The RMS output power is 2 watt on frontal loudspeakers and 5 watt on woofer.

Tally

In the Genius Intercom is also placed the system of sending tally informations for 4 cameras; this signal is transmitted through the 2 wires audio line sent to beltback terminals (optional) of cameramen

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Switcher/Video Distributor

The apparatus on bottom on the central zone of Genius O.B. BOX 08 is a 4 channels video switcher that has the function to change the input signal of VCR shown by left 5.6" monitor.

In the same apparatus is housed a 1x6 equalized video distributor which input is connected to output of SE800 video mixer to send the signal to more users.

Genius O.B. BOX 08 Case

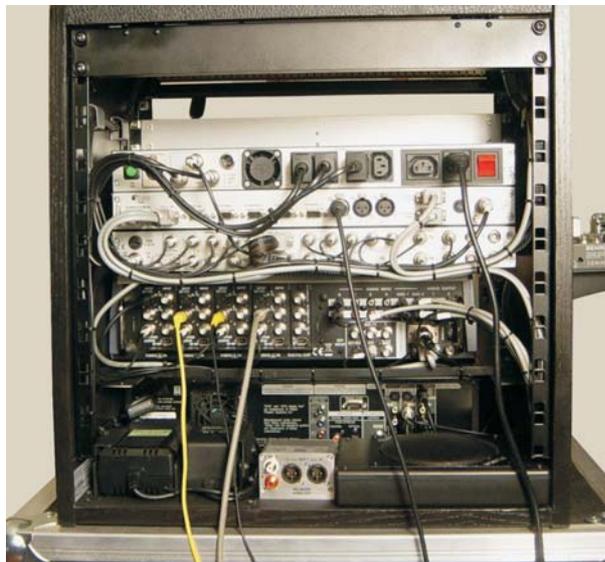
The external part of the container is manufactured in a black painted wood and the interior is made of a mechanical frame on which are housed all the apparatuses. This structure allowed us to reduce further the bulk in comparison with the previous version of Genius O.B. BOX.

The dimensions of the Genius O.B. BOX 08 are: (in mm.): 525 (W), 555 (H), 570 (D).

The weight of Genius O.B. BOX 08 is: 48,2 Kg.

Wire System

A particular attention has been given to the wiring of all interconnection cables among various apparatuses that



are identified each one with a number placed near every connector and are illustrated in the schemes of the provided manual.

Flightcase container for transport

In order to facilitate the transport and protect the Genius O.B. Box 08, a shockproof special container is available



constructed observing IATA norms.

The dimensions of flightcase container are (in mm.): 650 (W), 700 (H), 700 (D).

The weight of flightcase container is: 18,40 Kg.

Personalized configurations

Elman is able to furnish different versions of Genius O.B. Box 08 according to the needs of the client.

On request, the Elman can realize others flightcase for the installation of CCU systems, auxiliary audio production systems or other apparatuses (to agree with the customer requirements).

ELMAN is able to furnish all the necessary equipments for use of Genius O.B. Box 08: video cameras, VCRs etc ...

In accordance with constant improvement policy of products, Elman S.r.l. reserves the right to modify without notice and at any time, features and prices of its own apparatus.



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