# GENIUS D
## BROADCAST AUDIO CHANGEOVER

BROADCAST AUDIO CHANGEOVER PROCESSOR

- Digital DSP-based audio changeover with 2 analog inputs and 1 analog output
- Input to output switch and fade with customizable time intervention and restore
- Denoiser Module, AGC Stage , Delay and Tone Generator
- Graphic LCD display and front panel button for monitor and control
- Internal DTMF Encoder/Decoder for automation system
- 1 Rs232 Serial port, USB and GPIO port

AXEL TECHNOLOGY

# GENIUS D

**GENIUS D** is a fully digital audio changeover, designed for Radio and TV broadcast marketplaces.

## MAIN FEATURES

**GENIUS D** allows the connection of 2 analog input sources -main and backup- and constantly checks the main audio presence.
In case of fault, **GENIUS D** switches the input source from main to backup.The intervention/return time are configurable via software.
The input source switch can be automatic or manual via front panel, software or GPIn.

The audio process is fully-digital via DSP, where a special section is dedicated to audio control; the Denoiser module cleans the sound from unwanted noise.

The Tone Generator provides a test tone, useful to trim an audio network chain.

The DTMF Encoder and Decoder are also available with customizable strings that can be interfaced with radio and tv automation systems.

In **GENIUS D**'s front panel a big graphic display shows all input/output analog levels and the alarms.
The three buttons change the working status from automatic to manual with input source forcing.

Analog Inputs and Outputs are balanced over XLR connectors installed in **GENIUS D**'s rear panel.
Remote connections to **GENIUS D** are capable via USB and serial ports.

A GPIO port featured with open collectors and optocouplers states the **GENIUS D** working status, the alarm and all commands coming from the DTMF Decoder.

**GENIUS D** has a universal power supply worldwide used and it occupies 1 standard 19" rack unit.

## ■ GENIUS D TECHNICAL SPECIFICATIONS

### TECHNICAL SPECIFICATIONS

#### AUDIO FEATURES

| | |
|---|---|
| Audio process: | 24Bit-120Mhz DSP-Based audio process |
| Input Mode: | Stereo, MonoL, MonoR, MonoL+R,Swap Left/Right, Stereo Inverted Right, Stereo Inverted Left, Swap inverted Right, Swap inverted Left |
| Fading mode: | Fast switching, Slow fading, Normal fading, fast fading |

| | | | |
|---|---|---|---|
| Wait time: | From 1sec to 120sec | Working mode: | Off, Automatic, Manual |
| Return time: | From 1sec to 31sec | Output audio mode: | Stereo, Mono Left, Mono Rigth, Mono Left+Right |
| A.G.C: | Off to +2.0 dB/s 0.05db/s step | Output priority sequence: | Analog Out from Input-1 or Input-2 |
| De-Noiser: | Threeshold and expander module | DTMF Encoder/Decoder: | Encoder and Decoder with #4 Customizable |
| Tone Generator: | Off, Left=Right, onlyLeft, onlyRight @ 1 kHz | | String |

| FRONT PANEL OPERATION | | REMOTE CONTROL | |
|---|---|---|---|
| Automatic / Manual: | Automatic audio changeover or manual A/B selection | GPIO Connector: | SubD 15p HD |
| | | GPIO Type: | 4x GP In optocoupled, 4x GP Out Open Collector optoisolated |
| Level Input / Output: | 160x32p Showed in LCD graphic display | | |
| Manual Input selection: | Via front panel | USB: | 1x USB – B Type EMI Filtered |
| AUDIO INPUT AND OUTPUT | | Serial: | 1x Rs232 EMI Filtered |
| Analog Input-1 and Input-2: | 2x XLR female electronically balanced | Software Remoter: | Yes |
| Analog Output: | 2x XLR male electronically balanced | Ethernet Port /Web Server | No |
| | | Parser ASCII protocol: | Rs232 by default |

## ■ GENIUS D ORDERING INFORMATION

| Code: | Model: | Description: |
|---|---|---|
| A110120000 | GENIUS D | Digital audio changeover with 2 analog iinputs over balanced XLR, 1 analog output over XLR. DTMF Encoder and decoder, USB and Serial port, GPIN and GPOUT remote. 1u rack 19"space. Universal power supply. |