

# **MCC-8004**

# **VCC-8000**

# **ACC-8000**

The Broadcast Series

# MCC-8004

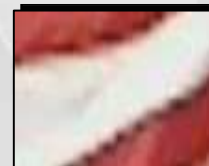
# MCC-8004 – Overview

- The MCC-8004 modules are four video inputs, 1 RU modules with DVI-I and VGA outputs
- Depending on the model, they can accept, any of the following video signals (auto detect capability)
  - PAL / NTSC (MCC-8004a)
  - SD SDI / PAL / NTSC (MCC-8004d or MCC-8004P)
  - HD SDI / SD SDI / PAL / NTSC (MCC-8004U)One module accepts a mix of different frame rates
- Support of all the usual output resolutions, from 800 x 600 up to 1920 x 1200 @ 50 or 60 Hz

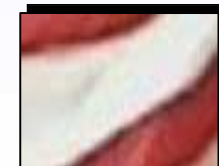
# MCC-8004 – Overview

- Fast boot (10 sec), “autonomous” module. It has its own power supply, controller and video processor
- Up to 15 MCC-8004 modules can be cascaded together to display up to 60 sources on a display
- Different MCC-8004xx models can be cascaded together or with VCC-8000, ACC-8000 modules
- MCC-8004P and MCC-8004U feature DCDi technology (Enhanced anti-aliasing from Faroudja)

Picture detail: Without DCDi



With DCDi



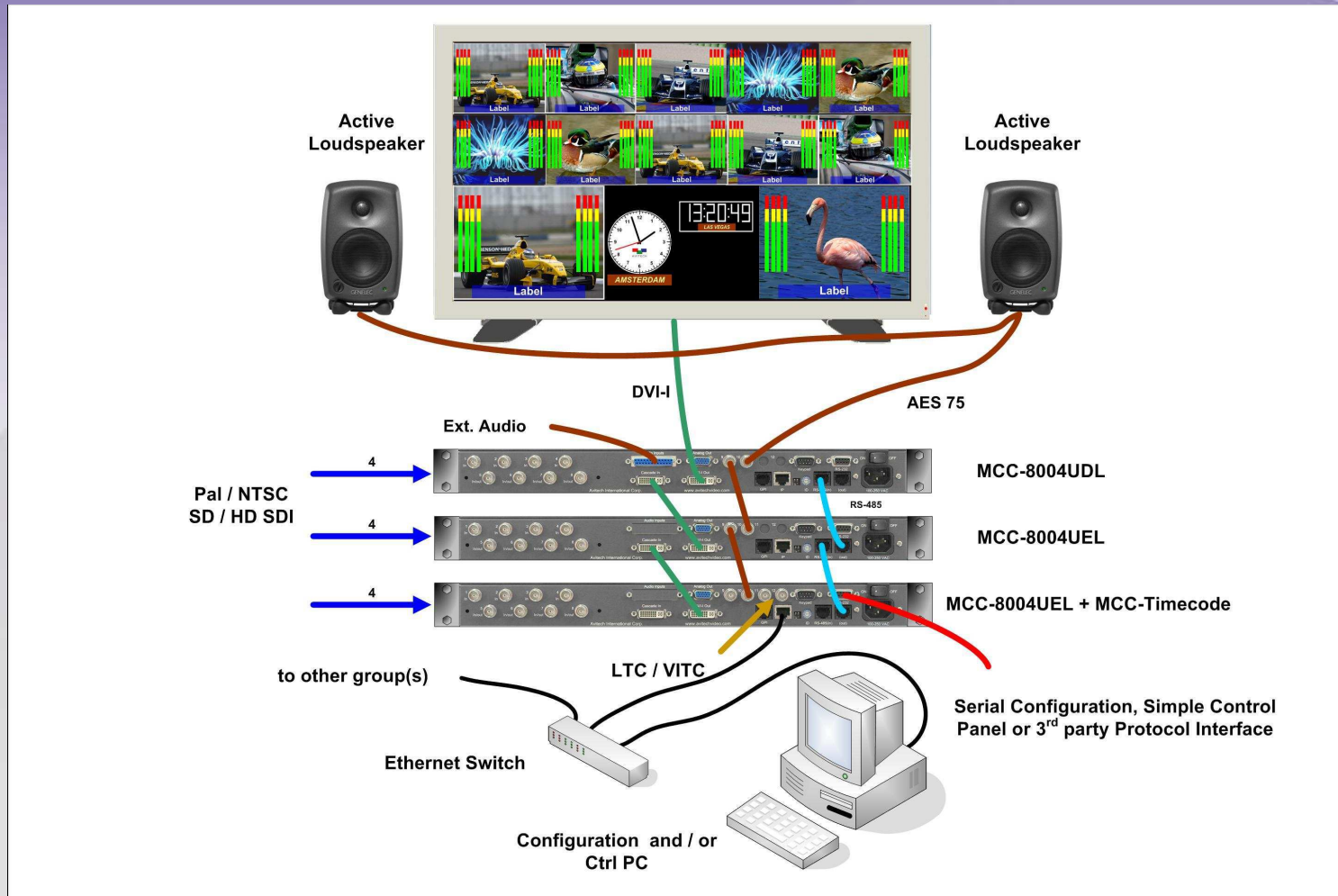
# MCC-8004 – Overview

- Galaxy & Cosmos - Free Ctrl & Cfg Software
- AvINET - Free SNMP proxy agent application
- PC is used to run SW (not needed permanently)
- Cfg & Ctrl over Ethernet or Serial port
- Avitech ASCII protocol (AAP) over Ethernet or Serial port – Use with Avitech free SW GUI panel
- Tally & Dynamic Labels: TSL Standard - Currently V3.1 over Serial port.
- Interfaces with leading production switchers & routers (Uses Cosmos with Cfg PC as interface)

# MCC-8004 – Overview

- Modular architecture: If a module in a group loses power, Ctrl & DVI-A are looped through it
- Allows to build up “No Single Point of Failure” Configurations
- Up to 26 presets / configurations can be saved in and recalled from the modules Flash EEPROM
- 8 GPI in for Tally Control / Clock Control / Presets Recall or 4 GPI out for Alarms
- Each module has its own analogue or digital clock or even a logo (Size up to full screen)

# MCC-8004 - Configuration example



# MCC-8004 – A full line of Products

- Each MCC-8004 model (a, d, P or U) exists in many versions:
  - With input loops - Passive for Analog, Active for Digital  
E.g. the MCC-8004dL
  - With embedded audio (4 stereo pairs per source) and one audio monitoring output – E.g. the MCC-8004PEL
  - With embedded & analog audio (1 stereo pair per srce) & one audio monitoring output – E.g. the MCC-8004aA
  - With embedded & AES audio (1 AES pair per source) and one audio monitoring output – E.g. MCC-8004UD



# MCC-8004 – Options

- *MCC-RPS* - External Redundant Power Supply
- *MCC-Timecode* - To sync clocks to the house time code one per module group is required
- *MCC-SCP* - Simple Control Panel. Used to recall presets / create simple layouts / control the clock as a stopwatch
- *Rear-Mount-Kit* - For mounting modules at the back of a rack (allow keeping cables inside the rack)
- *S-Video Adaptor* - External S-Video > Composite adaptor – one item per S-Video input required
- *DVII-DB15* - DVI-I to analog RGB (VGA) adaptor

# MCC-8004 – Rear view

Audio monitoring cascade    Audio monitoring output

4 analog stereo pairs/AES audio inputs

4 video inputs

VGA Out

VITC

MCC-SCP >

LTC

RS-232



input loops

DVI cascade

GPI

Ctrl. cascade

DVI output

Ethernet

Connectors in blue are optional

# MCC-8004 - Integrated OSD \*



\* OSD = On Screen Display

## Audio Meters

- Width & Transparency adjustment
- Up to 8 embedded audio meters
- One Phase Meter per Stereo Pair

## 3D Border

- From 0 to 6 pixels/lines width
- Can be any Color
- Each pixel/line can have a different Color

## Label/UMD

- Transparency adjustment – Background only or Background + Text
- Inside or outside of the video – Vert. pos. adjustment – Background can be full width
- Text & Background can be any Color
- Up to 32 Characters - 5 font sizes - Default or Bitmap Fonts
- Asian Characters Support
- Label can be turned ON or OFF for each Window

# MCC-8004 - Integrated OSD



## Tally

- Serial Tally: up to 3 levels
- GPI Tally: up to 2 levels
- Simultaneous Serial & GPI Tally
- Adjustable Tally colors
- Adjustable Tally attributes:
  - LEDs
  - Windows Border
  - UMD Background Color



## Dynamic Labels

- Serial TSL protocol (V3.1) support is standard
- Simultaneous Static & Dynamic labels possible
- Dynamic labels up to 16 Characters
- AAP (Avitech ASCII Protocol support) over Serial or Ethernet is standard – Allows dynamic control of Labels and much more

# MCC-8004 - Integrated OSD



(For illustration purposes only – Actual Alarm display is different)

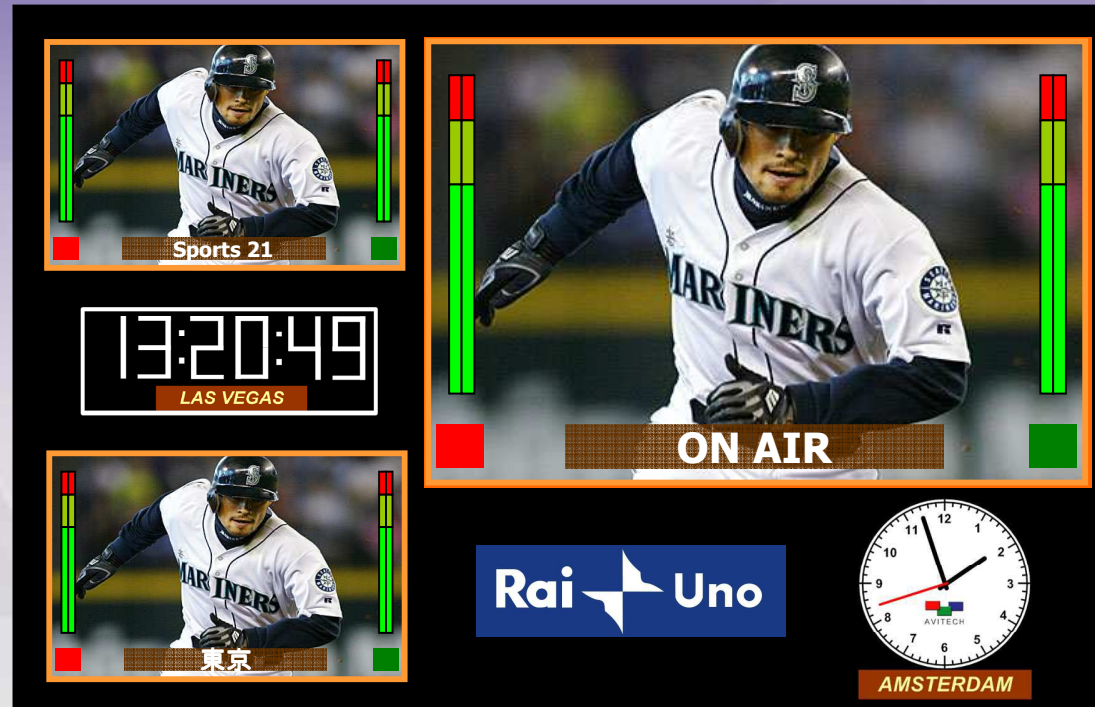
## Visual alarms

- Loss of Video
- Loss of Audio
- Video "No Motion"
- Audio Too High (Loud)
- Audio Too Low (Quiet)
- Excessive Phase error
- VBI data – Loss of Close caption

## Video Signal Standard Display

- The Video Standard of the Source Signal can be displayed on a permanent basis
- The Color of the indicator Background & Font can be adjusted

# MCC-8004 - Integrated OSD



## Clocks / Logos

- One Analog / Digital Clock or Logo per Module
- Clocks are free running or locked to Time Code (MCC-Timecode opt.) or NTP protocol
- Clocks can be used as a stopwatch – Start/Stop, Count up/down, go to Preset (8)
- Logos are Bitmaps that can be downloaded – Size can be up to Full Screen

# MCC-8004 - Layout Example

- Each Window Size and Position is adjustable independently
- Free or Fixed A/R (4:3 / 16:9) for each Source Picture and Window
- Full Screen Mode - Any source can be set to Full Screen



# The MCC-8004Q



- Very Competitive HD/SD Quad Split
- Four Fixed Sized HD/SD SDI Autodetect Inputs Quad Split with Full Screen capability
- DVI-I & VGA outputs - Supports the Same Output Resolutions as all the MCC-8004 models
- Up to 8 embedded Audio Meters - Standard
- Audio Monitoring Output Standard (AES/EBU 75Ω)





# The MCC-8004Q



- MCC-8004 Serial & Ethernet I/F
- No DVI Cascade - Ctrl Cascade Support (15 max)
- Same GPI, TSL, AAP, On Screen Alarms, SNMP support as for any MCC-8004 family members
- (No clock, Input Loop or An./AES Audio Support)
- Optional Ext. Redundant Power Supply (MCC-RPS)
- Currently ships

