## Section 5C – GV Korona Technical - Panels


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## Section 5C – GV Korona Technical - Panels

- GV Korona with S-Series
  - Overview
  - S-Series Frame
  - Panel Features
- Operation
  - Bus delegation
  - Transition Area
  - Master E-MEM
  - Menu
- Hardware
  - Windows 10 SBC
  - Power Supplies
- GV Korona Panel
  - Installation / Connections
  - Network Addressing
- Diagnostics
- Calibration
- Browser Pages
- Diagnostics and Logs
- Troubleshooting / Diagnostics

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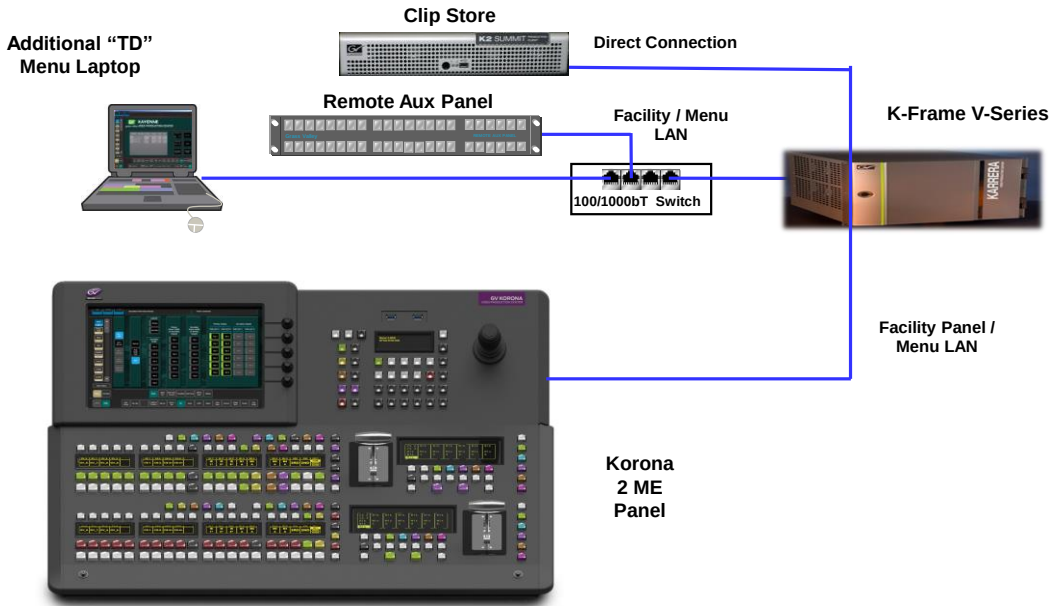
## GV Korona Panel with V-Series Frame




The Clip Store, Panel LAN and Menu/Facility LAN must be connected as shown with no Ethernet switches or Routers between the components and the Frame.

The Karrera system uses a panel constructed of internal "Stripes". Each row The Menu "Touch" Display Panel is an option on Karrera. When supplied by GV, it will use a different (than Kayenne) proprietary Power and Data Cable set to communicate with it's standalone Windows 7, 64 bit PC. This is a small fanless "brick" PC and can mount on the articulated arm directly behind the menu panel with the supplied bracket.

The Optional Aux Panel has separate Power and Data connections to the rear of a Karrera Panel. The RJ-45 connector (Stripe Data, not ethernet) does NOT carry power.

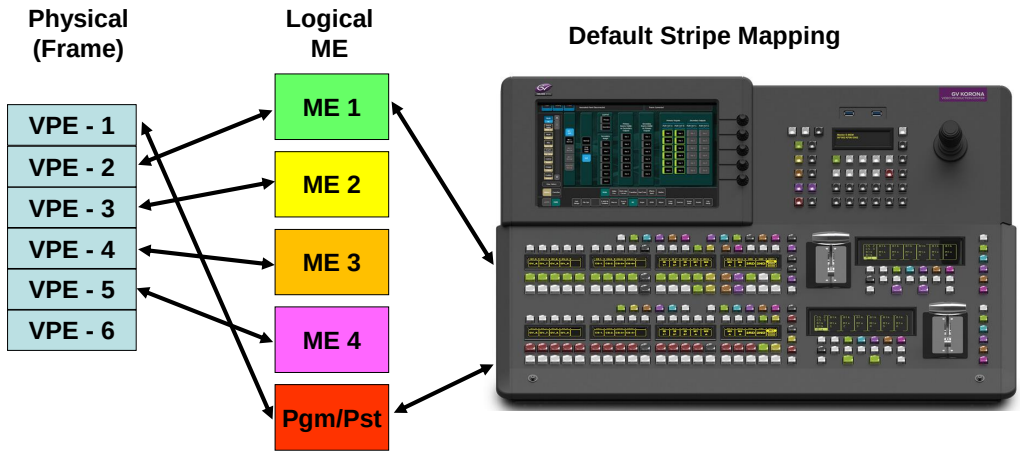
The Panel and Menu both communicate with the Karrera frame using 2 Ethernet (10, 100, 1000bT) frame connections.

Other devices may communicate with the Karrera frame via Ethernet.

There are 4 network ports on the rear of the Karrera Frame. Grass Valley requires that the connections between the frame and panel & Menu are dedicated and not run through a switch.

The connection between the ClipStore and the Karrera Frame must also be dedicated and not run through a switch.

## Physical v Logical Mapping – V series - 6 VPE (3 RU)




**An ME may also be used as an eDPM or assigned to another Suite**

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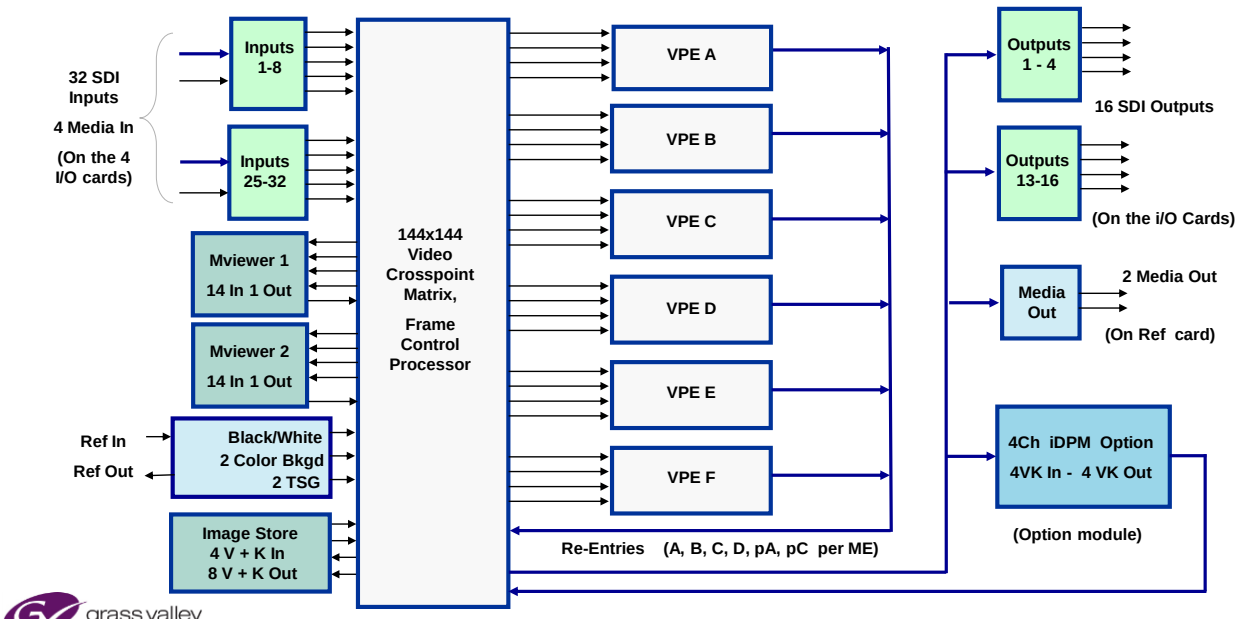
In the S-series the physical ME's are assigned as shown with a Korona panel.

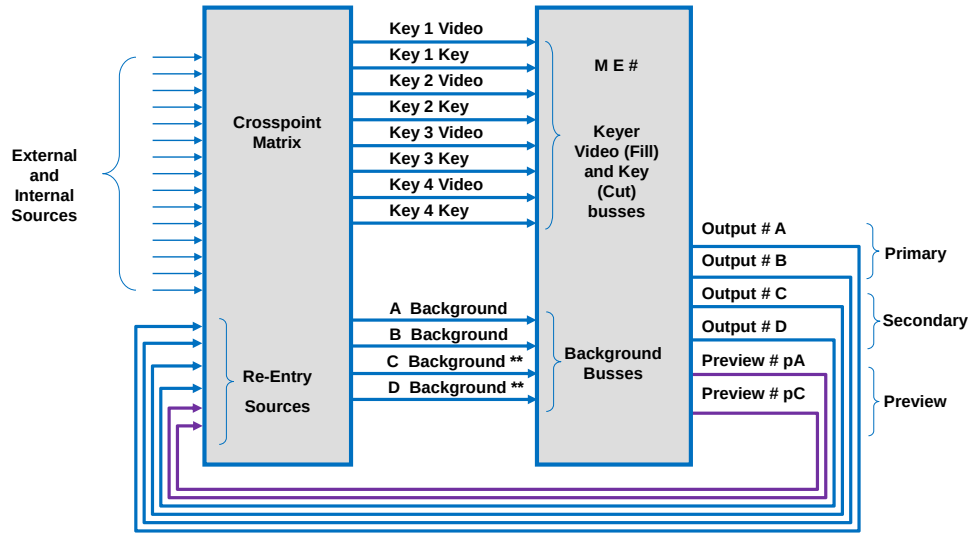
## K-Frame V series Video Flow - 6 VPE (3 RU)




The K-Frame V series houses 3 boards from the front.

The reference Out is NOT a generator it is an output from the Reference input.

## GV Korona - V-series - VPE Video Flow




**6 Sets per Triple Video Processor**

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**ME Mode Notes:**

* Key busses 5 and 6 only exist the K-Frame Dual ME boards.

** The Utility busses U1 and U2 only exist in the K-Frame Dual ME boards. These are used for backgrounds for the Secondary Partition in Split Mode described below. The C and D busses act as Utility busses for the S-series frame.

The other Difference is the M E View output (pM) active with v6.0 software.

Each Mix Effects can be configured for different operating modes.

1. Normal Mode. Main output is A – all keys active. B, C and D are clean outputs – No keys active.
2. Programmable Clean Feed Mode (PCF) (Flexi-Key) – Provides controllable keys on all 4 ME outputs
3. Split Mode. (Double Take) – Enables Primary and Secondary ME functions. Keys can be assigned to either Primary or Secondary. Utility busses are Secondary backgrounds.
4. Split / Layered mode configures an output as a Key channel. If in Split mode, the Primary side Key will be output B and the Secondary side Key will be output D.

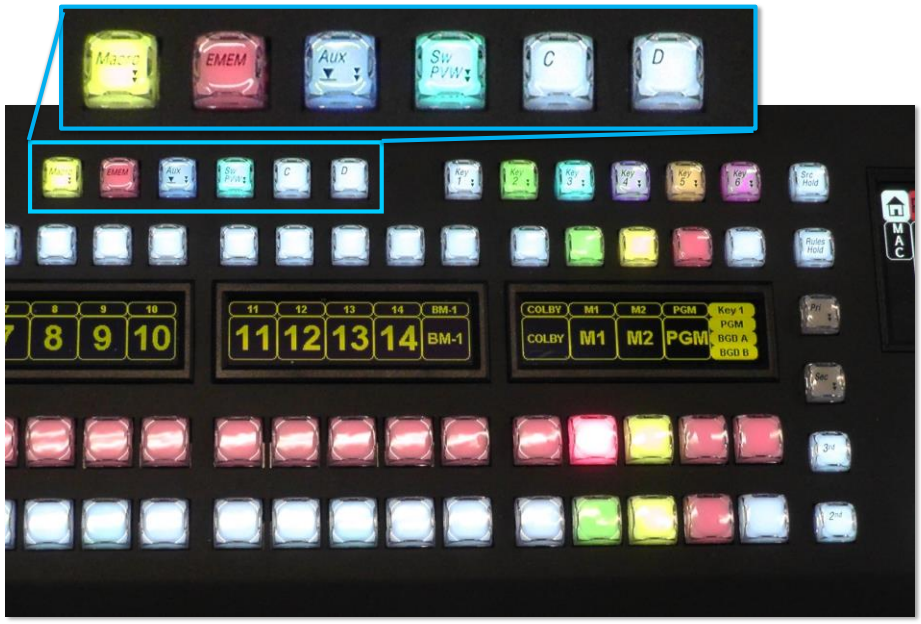
## GV Korona Panel – Bus Delegation

### Bus Delegations

Almost identical to the Karrera Panel

Source Hold
Rules Hold
Primary
Secondary
3rd Shift
2nd Shift

Note: There are no A or B bus delegate buttons

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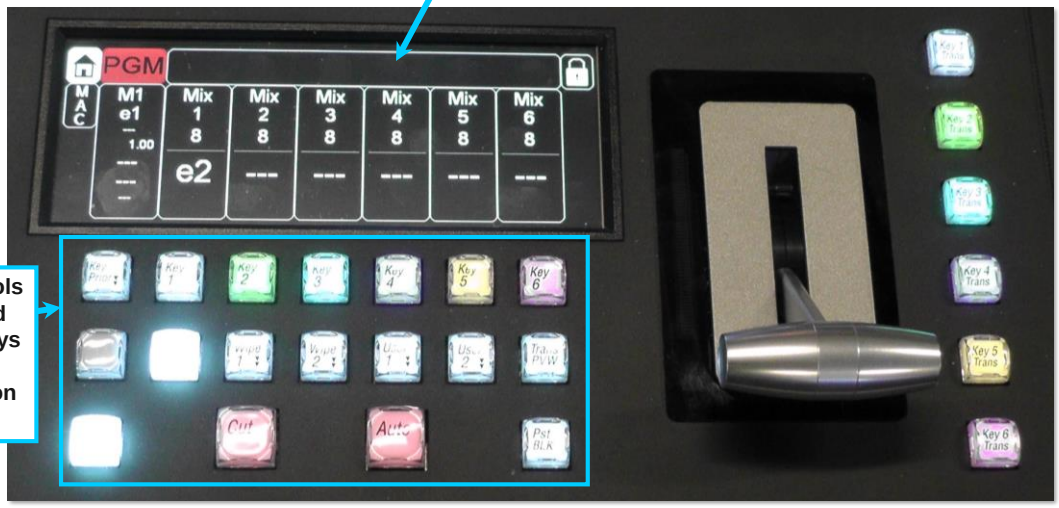
## GV Korona Panel – Transition Controls and Display

ME Transition Area

New colored touch screen display




Transition controls for Background with 3, 4 or 6 Keys and standard Karerra transition controls

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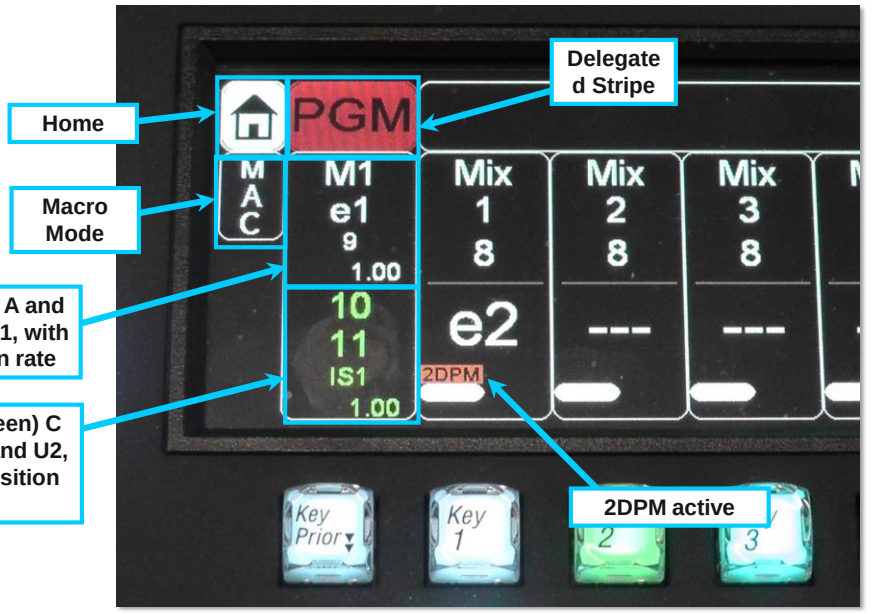
## GV Korona Panel - ME Transition Display

### ME transition Area

Display showing the delegated Stripe, Video and Key source information

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## GV Korona Panel – Macro Mode

Macro mode

Attach Enable
Show Attach
Append Macro
Record Macro


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## GV Korona Panel – Stripe Delegation

### Stripe Delegation


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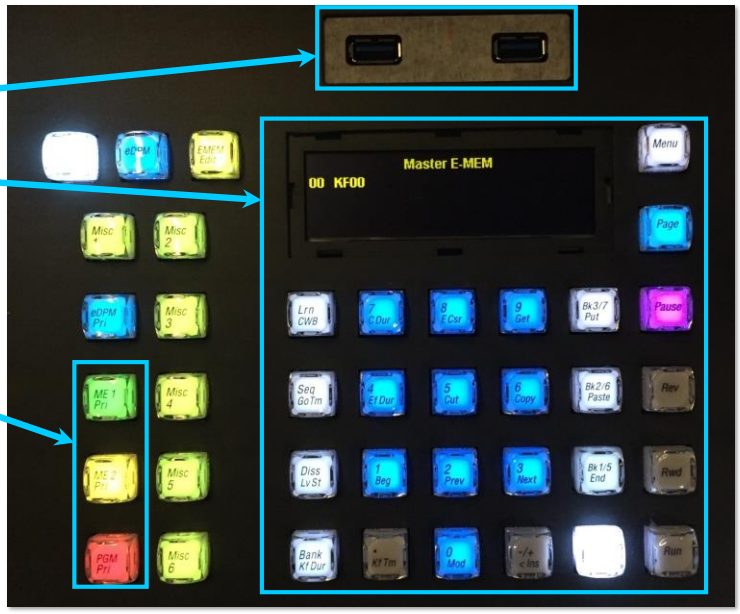
## GV Korona Panel – Master E-MEM Panel

### Master E-MEM area

2 - USB 3 ports
Standard Kayenne Master
E-MEM keypad

Auto Recall
eDPM Mode
E-MEM Edit

Level selections for
3 fixed ME levels
ME 1, 2 and PGM
eDPM Level
Miscellaneous Levels 1-6

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## GV Korona Panel - Master E-MEM Menu 1

Master E-MEM area
Menu 1

Macro Mode
Panel Memory
Stripe Delegation
and
Transition Rate


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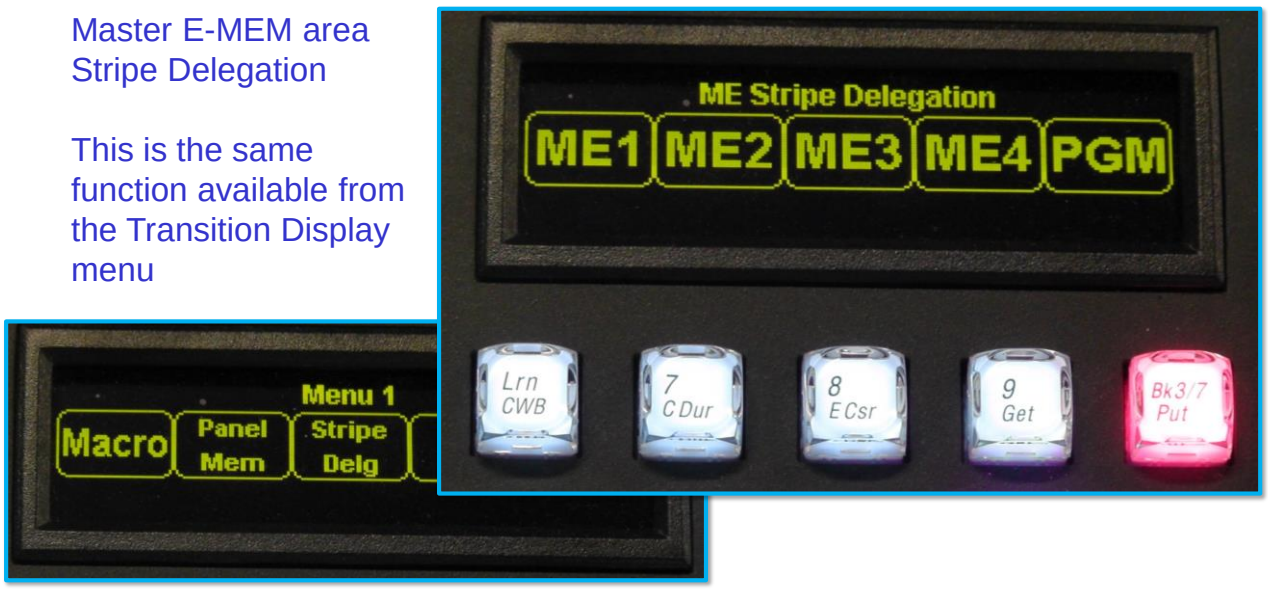
## GV Korona Panel – Stripe Delegation

Master E-MEM area Stripe Delegation

This is the same function available from the Transition Display menu

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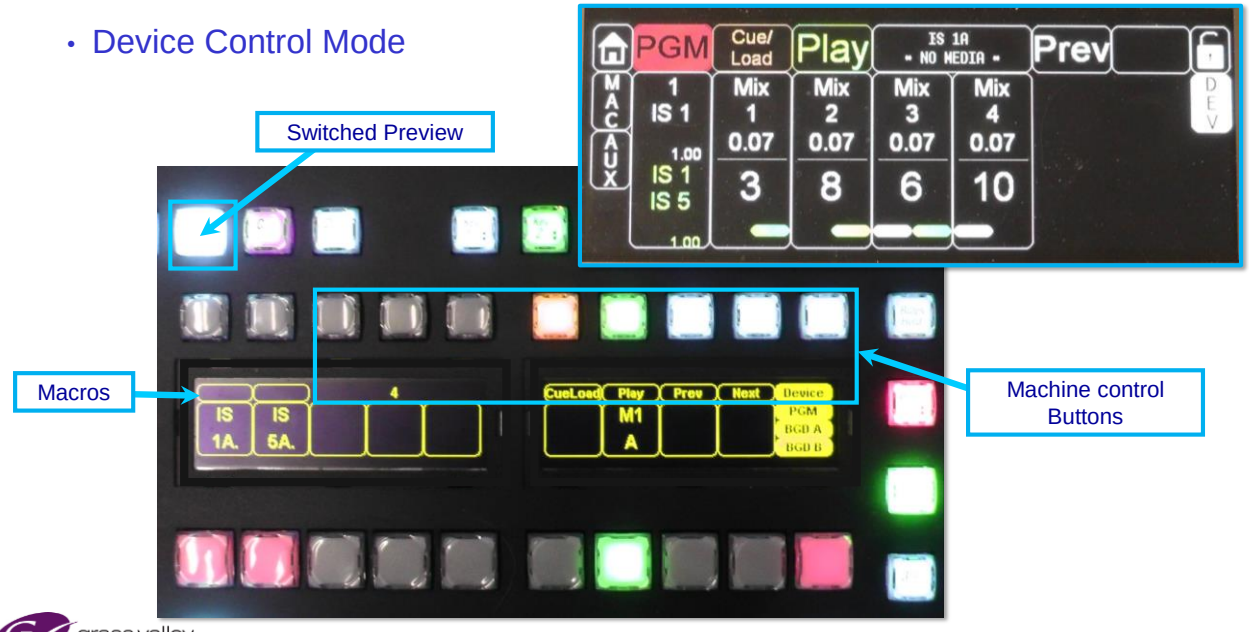
## Device Control

- Device Control Mode

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Device Control can be performed from any transition control touch screen

Devices can also be controlled from the right hand side of any bus row delegated to device control mode.

This is done by holding down the Switched Preview button. The 8 Right hand buttons and their displays now control a selected device.

- Devices can be set for a single device or the controls can follow a selected bus row.
- Hold down 'Prev' and 'Next' together and choose a machine or any non machine xpt to return to follow mode.
-

## Aux Bus Control

- Delegate a Resource for Aux bus transition in the Suite Prefs, Resource Allocation menu



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When Aux bus control is delegated to a bus row the Aux sub menu in the transition display will allow Aux bus transitions if a resource has been assigned for aux bus transition.

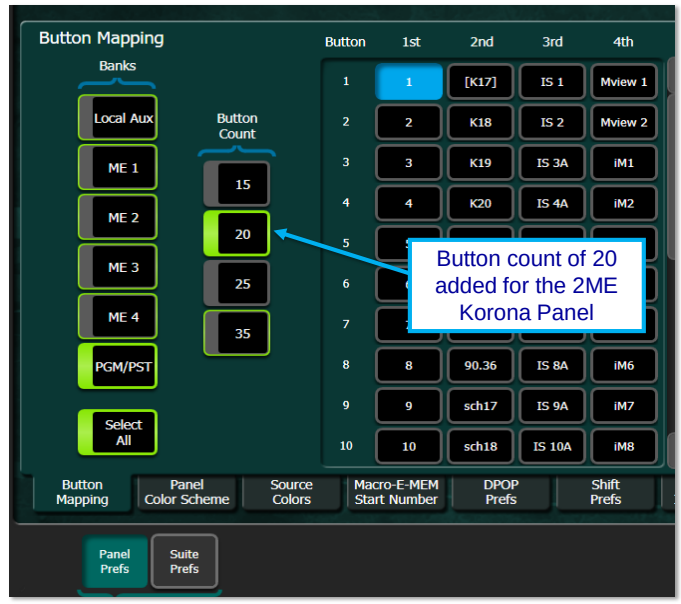
Resources can be assigned to Aux transition in the Suites Prefs, Resource allocation menu.

## GV Korona Panel - Menu

The Korona Menu runs on Windows 10

The Processor runs both the Menu and the Panel software!

Only difference from the Karrera Menu is the addition of a 20 Button Count selection for the 2ME Korona Panel

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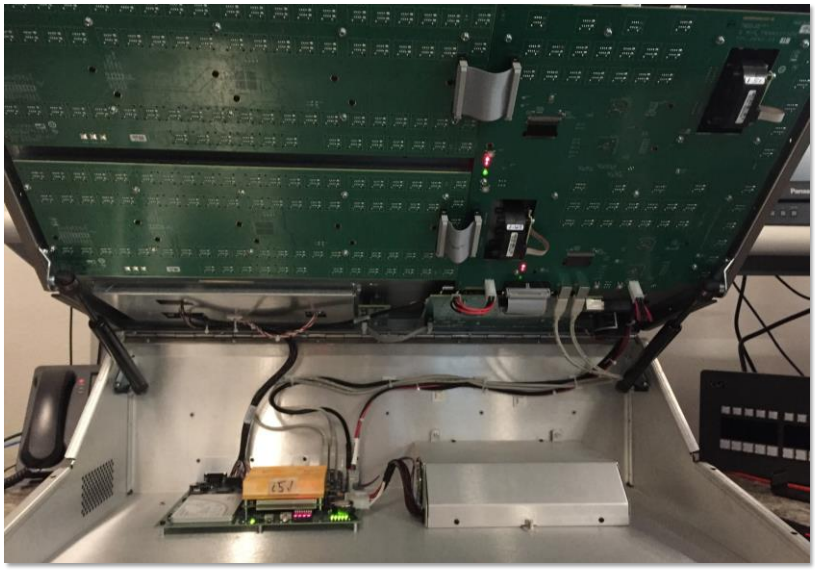
## GV Korona Panel – Internal View

Windows 10 processor
SSD – 120GB
2 - Power supplies

Sub Modules
- Source select modules
- Dual ME module
- Master E-MEM
- Menu touch screen

USB stripe connections



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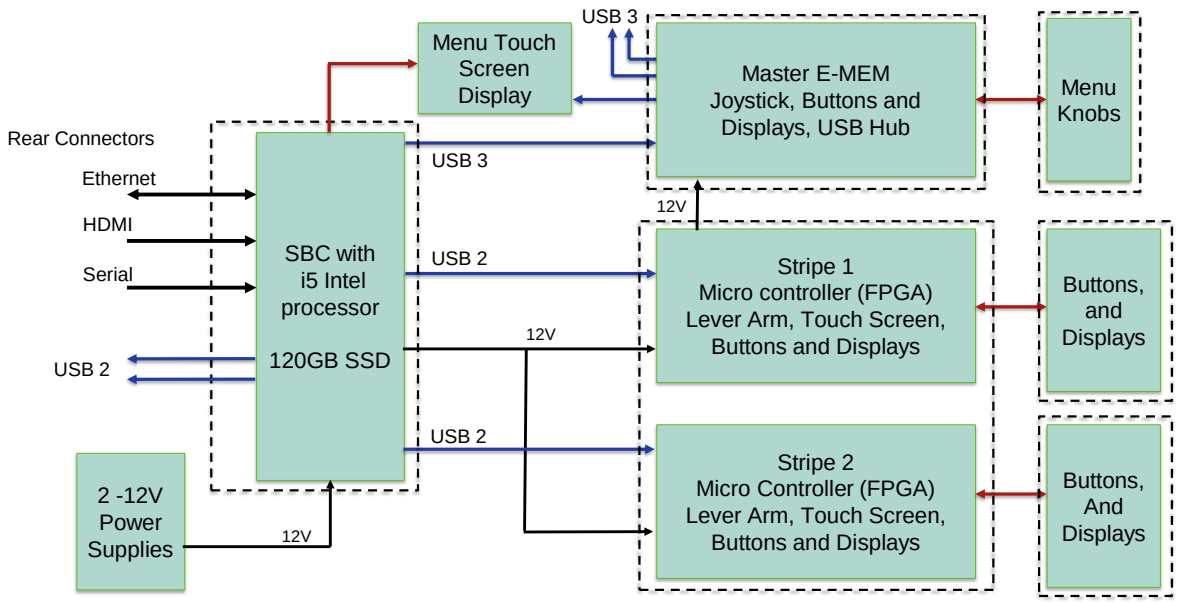
## GV Korona Panel – 2ME Block Diagram

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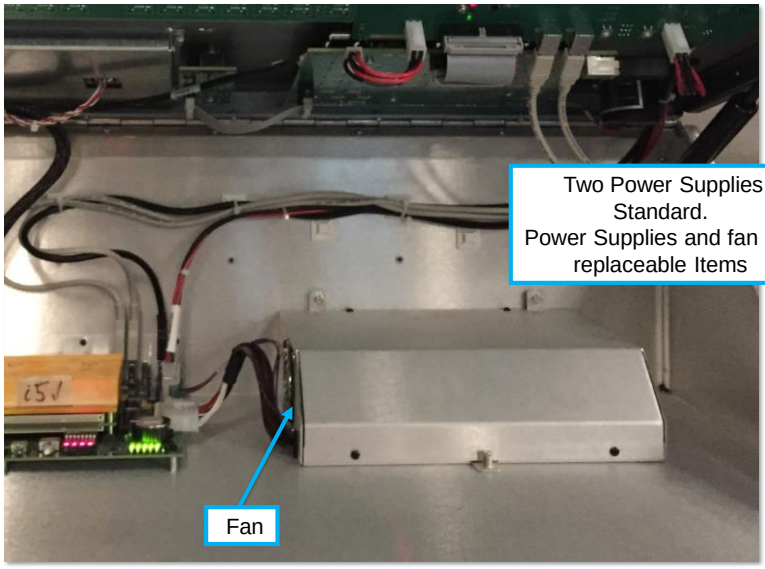
## GV Korona Panel – Power Supplies

Power supplies
2 Standard
12V output
Fan in PS only
Air flow Left to Right

Cooling Air Flow is in from the left, across the Circuit Board, Power Supplies and then exits at the right rear.

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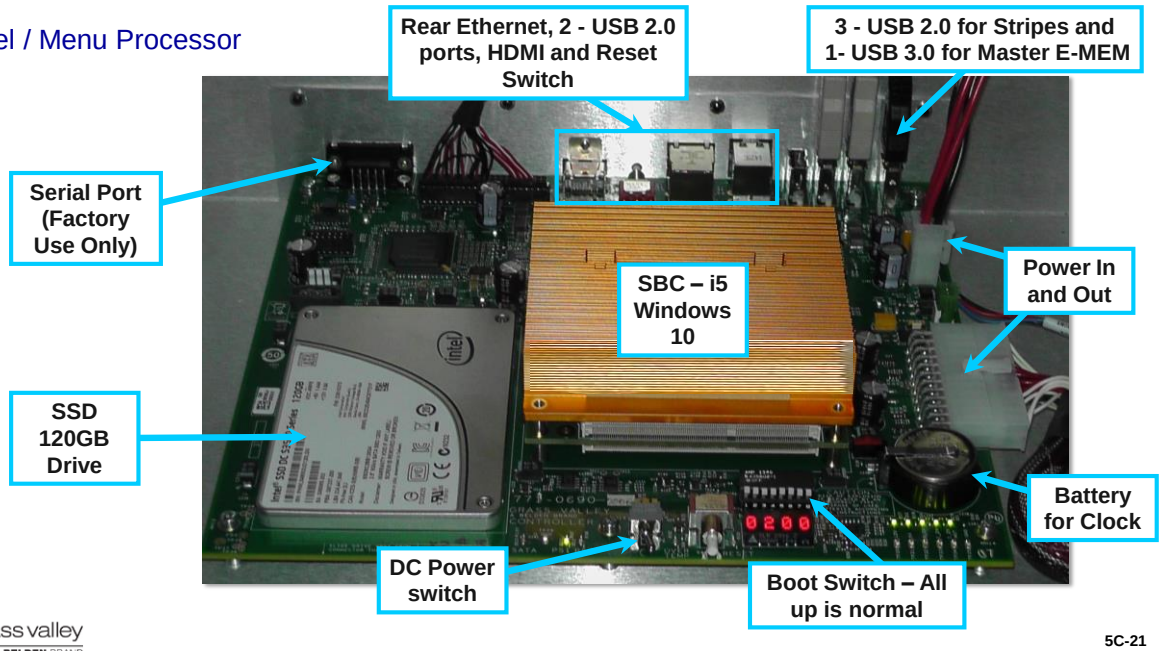
## GV Korona Panel – SBC

### Panel / Menu Processor

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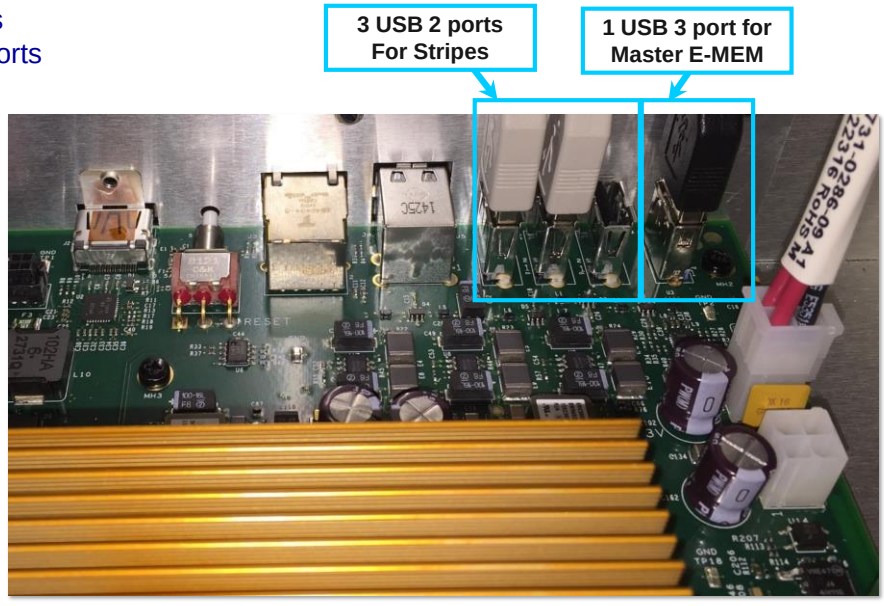
## GV Korona Panel – USB Connections

USB connections
The 3 USB 2.0 ports are identical
The two power connectors are identical

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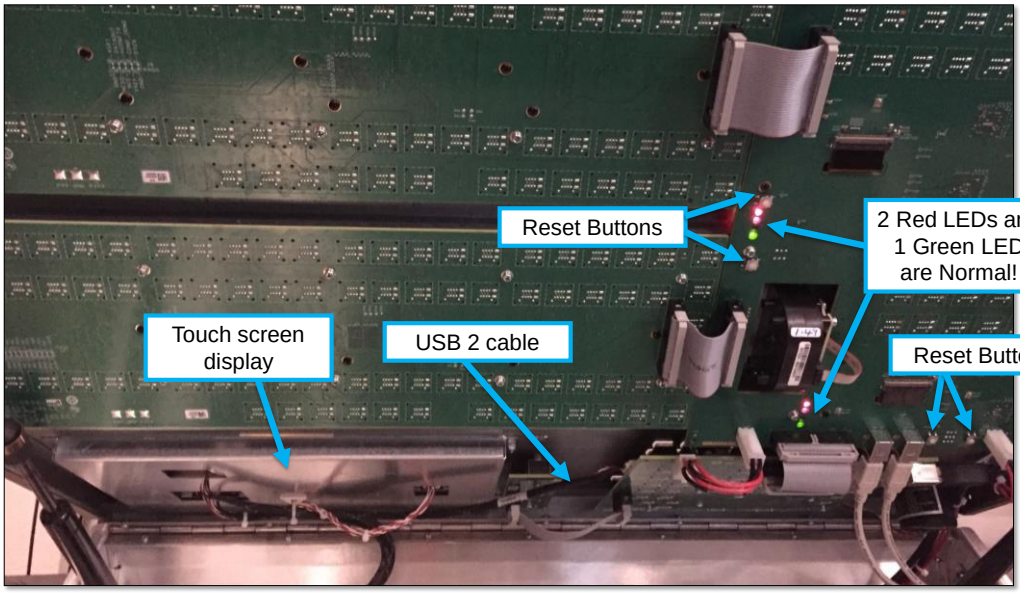
## GV Korona Panel – Internal Connections

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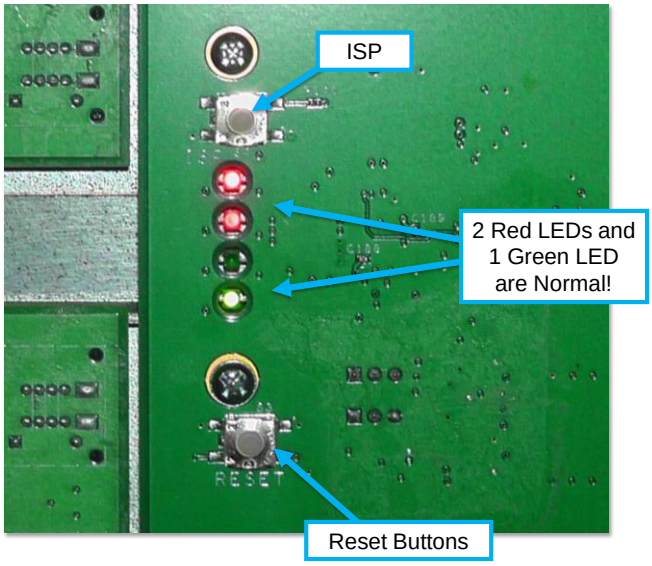
## GV Korona Panel – Processor Rest

There are 2 buttons associated with each Micro controller
- One is for Reset
- One is for ISP mode

ISP mode is for factory use only for loading firmware -
It requires a special sequence to activate it

If activated by accident a normal reset will bring the controller back to normal

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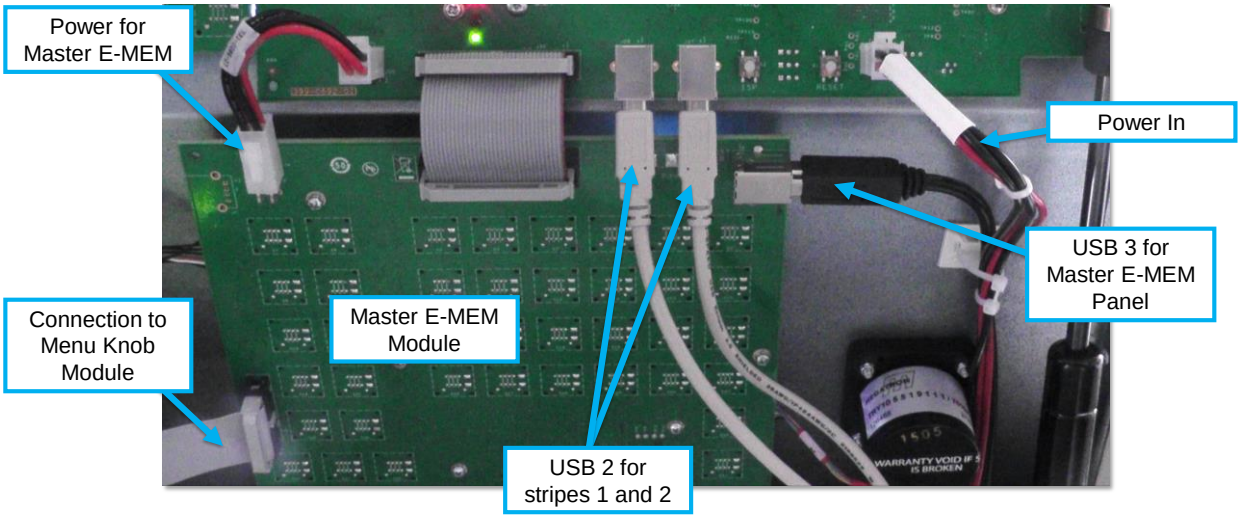
## GV Korona Panel – Internal Connections

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## GV Korona Panels - 2 & 3 M/E – Rear Connections

Rear connections
2- Power supplies
Fan exhaust

2 - USB 2 ports
Ethernet port – 10/100/1G - NOT auto sensing
Reset button (recessed)
HDMI – Active copy of touch screen display
Serial port (factory Use Only)


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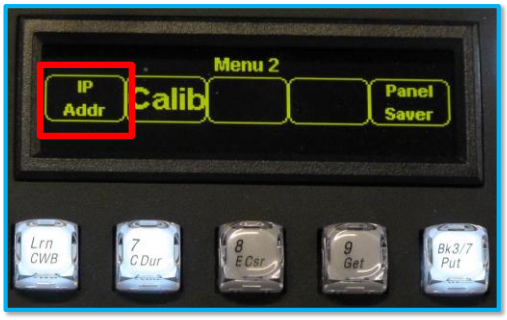
## GV Korona Panel - Network Addressing




Select The Device / Address to examine


Press “Menu” to access the First Page
Press “Page” to move between Pages
Select “IP Addr”
Use the Top Row of Buttons for Menu Selection

“Connect” will initiate communication with the Video Frame

Note: Unlike Karrera and Kayenne you cannot change the IP values from this menu

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**Karrera Network Addressing**

The Karrera Panels have 2 pages of Panel utility menus.

From any E-Mem panel, select “Menu and Page” to view and chose the desired menu.

Panel and target Frame IP Addressing is done from page 2.

## GV Korona Panel Adjustments

### Panel Calibration Lever Arm


Move the Lever Arm to the position indicated by the Arrow. Press “Next”. Move the arm to the other end of travel, press “Next” then “Exit” to finish

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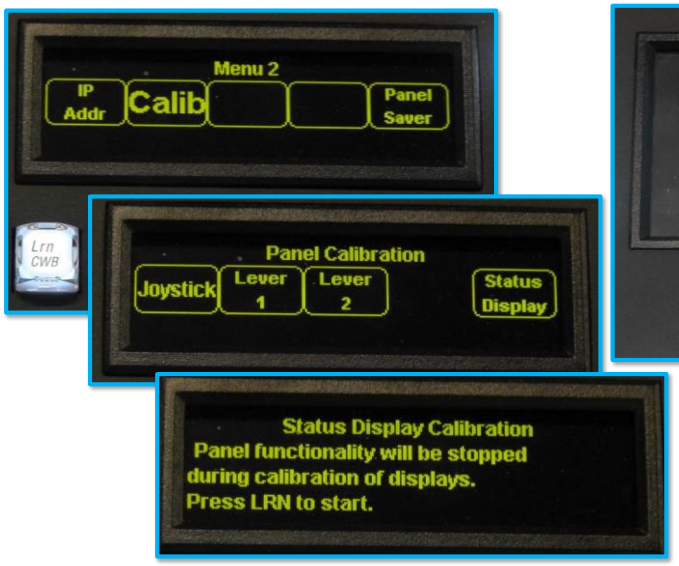
**Panel Adjustments**

The Panel Menu functions can be accessed by selecting “Menu” from any of the E-MEM panels.

The Transition Lever Arms and the Joy Stick all require a calibration after any software change or update.

From the Panel Menu, select “Calib”. Then Select the device to calibrate, Joystick, Lever 1 or Lever 2. Lever 3 may be selected on a 3 M/E Panel. The individual routines will have instructions appear on the panel displays. Follow the instructions and “Exit”.

## GV Korona Panel Display Touch Adjustment




The screen will display a green target in four positions. Top left, Top Right, Bottom Left and Bottom right. It will move between these positions as each is touched. When complete it will move to the next display and exit after the last target is pressed.

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**Panel Adjustments**

The Panel Menu functions can be accessed by selecting “Menu” from any of the E-MEM panels.

The Transition Lever Arms and the Joy Stick all require a calibration after any software change or update.

From the Panel Menu, select “Calib”. Then Select the device to calibrate, Joystick, Lever 1 or Lever 2. Lever 3 may be selected on a 3 M/E Panel. The individual routines will have instructions appear on the panel displays. Follow the instructions and “Exit”.

## GV Korona Panel – Menu 2

### Panel Saver


Select the desired Time in Minutes for the panel to go into Saver Mode (dark) after non activity on the panel

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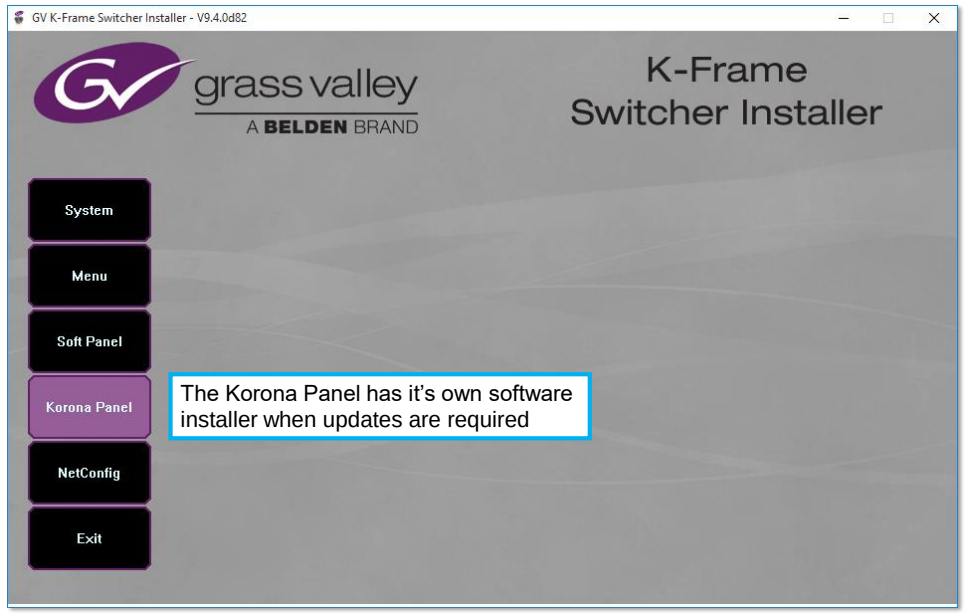
# GV Korona Panel - Software Install

## Software Install

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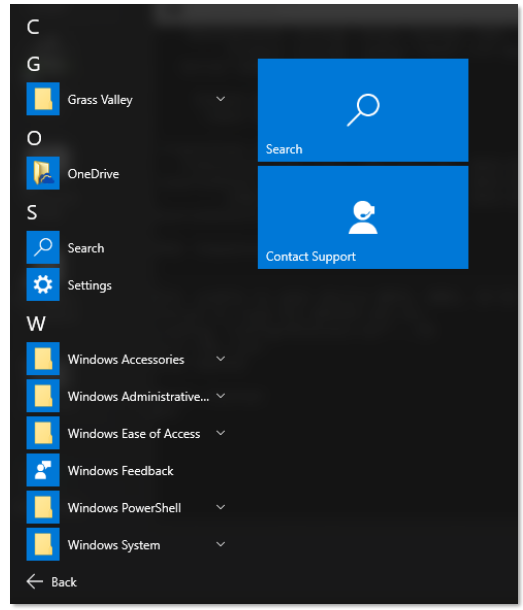
## GV Korona Panels – Windows 10

### Windows 10 - Custom

- The windows 10 implementation in Korona has many items removed so they do not conflict with the panel software
  (Such as web browser etc.)
- No other software should be loaded to ensure it does not cause issues with the panel software

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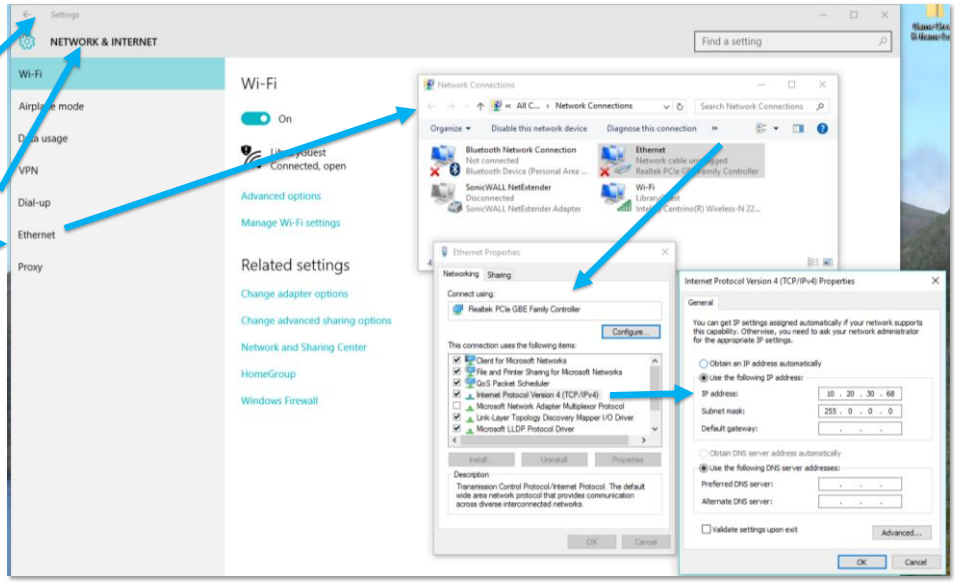
## GV Korona Panels – Windows 10 – Network 1

Windows 10
Network

Go to:
Settings
Network & internet
Ethernet
Properties
TCP/IPv4

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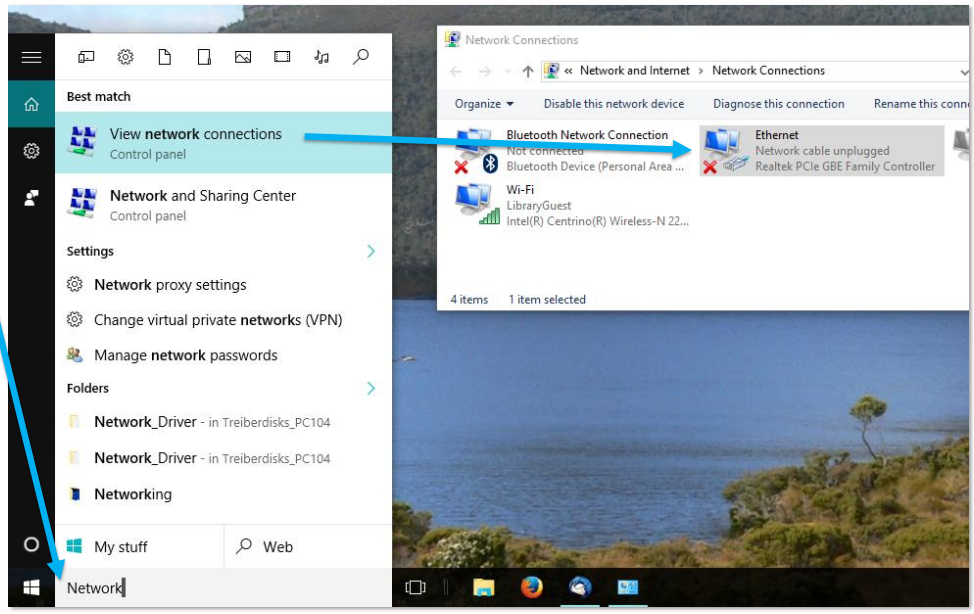
## GV Korona Panels – Windows 10 – Network 2

Windows 10
Network

Or simply type in 'Network' into Cortana (Windows search engine) And choose 'view Network Connections', Ethernet, Properties, etc.

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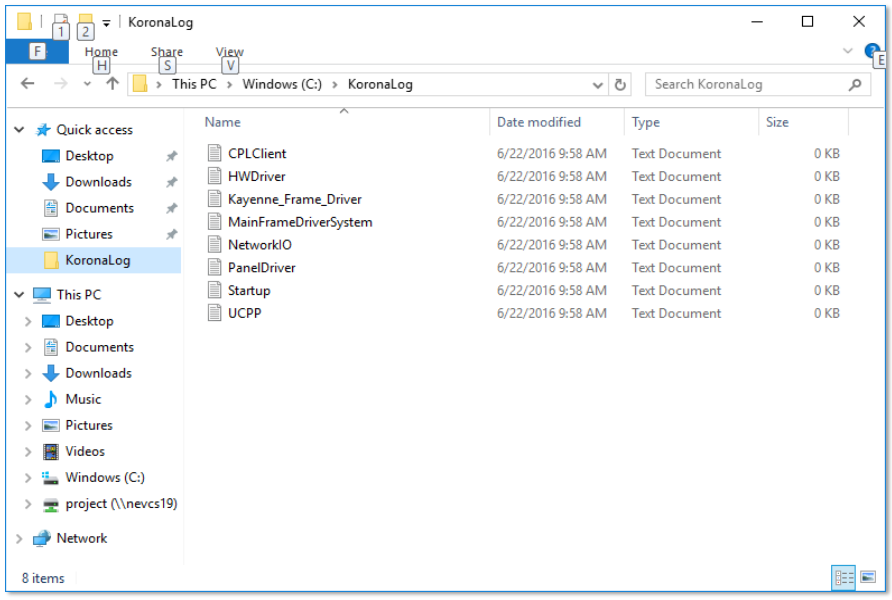
## GV Korona Panels – Windows 10

'File Explorer' does show the Korona log files

Normal Windows logs are also maintained

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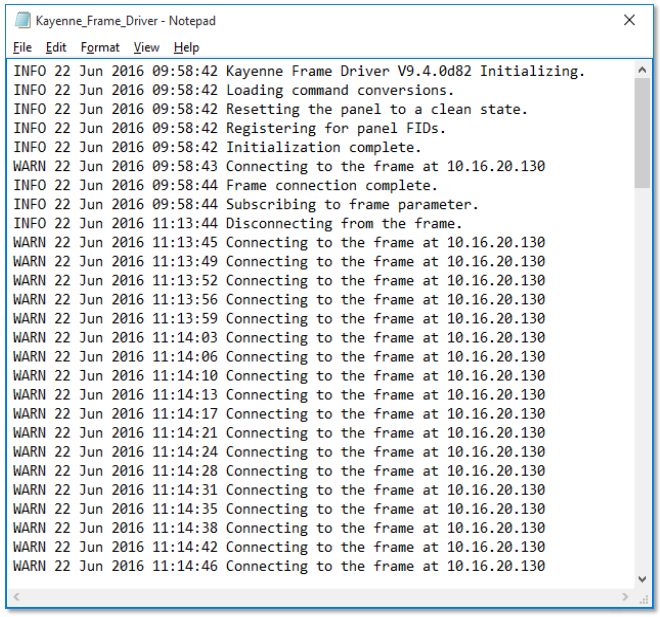
## GV Korona Panels – Windows 10

Under File Explorer does show the Korona log files

The Kayenne_Frame_Driver Log shows the Windows connections with the frame

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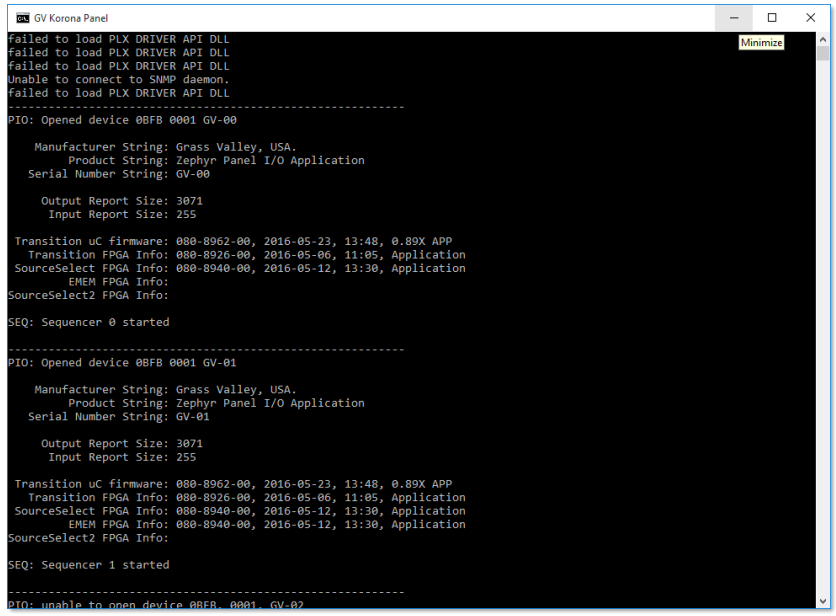
## GV Korona Panels – Windows 10

Current software also shows a start up sequence when the Korona Panel is reset

This may not be shown in the released version

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