9. Diagnostics

The platform logging levels for all software modules are supplied and shall be controlled by levels 1 - 4 and by using VLOG including App, Kernel, All and Off.

9.1 iPerf Support

SmartCast shall support iPerf latest version. iPerf is only for development purposes. A press of MENU, LEFT, RIGHT then PLAY or UP launches iPerf and displays an entry box for digit entry.

9.2 Secure Command Stick Diagnostic Key

The secure command stick is a special diagnostic key used to execute encrypted non-modifiable script on production secure TV. On insertion of a USB stick loaded with the secure command stick (packaged command scripts), the TV must execute the loaded script presented. Distribution of this key is restricted to certain VIZIO and trusted SOC personnel. This is a secure method that can be used to fix TV's by tech support and can be used to modify TV state, and/or copy files to/from the TV.

9.2.1 Command Stick Behavior

	Command Stick Behavior	Notifications
1	A text display area at top of the screen with white background and black text with 24 point.	
2	When command stick starts notification displays and remains until command stick terminates.	Command Stick Running
3	If the script exits with a 0 status the notification changes to	Command Stick Success – Remove USB and Power Cycle TV
4	If the script exists with a non-0 status the message should change to	Command Stick Failure – Remove USB and Power Cycle TV.
5	Insertion of USB with Command Stick loaded does not launch the USB Multimedia and does not display the media app.	

9.3 Network Remote Logging

If Network Logging is enabled, console log data is saved. Periodically the stored logs on the TV are sent to AWS S3 server. AWS S3 logging is https based so already secure. In addition to the log data, each packet will include the TV's model group, identity, a packet sequence number, and a timestamp.

The out logging client module shall include:

	Out Logging Client Module
1	Kernal - Kernel logs shall be captured from AC on.
2	Boot
3	Middleware
4	Platform logs
5	Audio Video Logs
6	REST
7	Available to uploading service then supported. Logs captured for all above.

8	Modules in software that to expose log levels 1 – 5 from serious warning to error log notifications.
9	VIZIO API shall control log levels and defines which logs and log levels get loaded to server.
10	When remote logging is in progress than USB logging mode is not supported.
11	Enabled by SC platform configuration which shall be defined by VIZIO. Currently configured to every TV but could be a subgroup if desired.

9.4 USB Logging Mode

	USB Logging Mode
1	To start the debug data logging, a USB stick with a file named "enable_log2usb" shall be inserted.

9.5 Debug/Factory Interface

For details refer to Factory Calibration.