



# Service Manual

## EON 600 Series

Two-Way Multipurpose Self-Powered Sound Reinforcement  
& Self-Powered Subwoofer

- EON610
- EON612
- EON615
- EON618S





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**Before You Begin - Important Information**

**Before using your EON® speaker system please review the following for important information on safety and protection of your investment in quality loudspeakers.**

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. Service Instruction in Owner's Manual: "CAUTION - THESE SERVICING INSTRUCTIONS ARE FOR USE BY QUALIFIED SERVICE PERSONNEL ONLY. TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT PERFORM ANY SERVICING OTHER THAN THAT CONTAINED IN THE OPERATING INSTRUCTIONS UNLESS YOU ARE QUALIFIED TO DO SO."
16. To completely disconnect this apparatus from the AC mains, disconnect the power supply cord plug from the AC receptacle.
17. "WARNING – TO REDUCE THE RISK OF FIRE OR ELECTRIC – SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE."
18. Do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.
19. The mains plug of the power supply cord shall remain readily operable.



## Features:

- ▶ JBL Premium Transducers
- ▶ 1000 W highly efficient Class-D amplification
- ▶ Maximum SPL Output: 124dB
- ▶ System Type: Self powered 10", two-way, bass-reflex
- ▶ Frequency Range (-10dB): 52Hz - 20kHz
- ▶ Frequency Response (-3dB): 60Hz - 20kHz
- ▶ Coverage Pattern: 110 x 60
- ▶ Bluetooth Control
  - 3 Parametric EQs + Hi & Lo Shelf
  - Gain and Delay
  - Save and Recall settings
- ▶ JBL Engineered Application Presets
  - Main
  - Monitor
  - Speech
  - Subwoofer
- ▶ 3 x M10 Suspension Points
- ▶ Standard 35mm pole cup with stabilizing screw
- ▶ Lightweight, rugged polypropylene enclosure

## Applications:

- ▶ The EON610 is a powered portable PA speaker in the EON600 series from JBL Professional. It has been designed to deliver class leading performance in a variety of applications including use as a main PA, a stage monitor, and rear and side fills. A lightweight, highly useful enclosure allows the speaker to be easily transported and set up wherever sound reinforcement is needed.
- ▶ Enclosure designs have been optimized for ideal acoustic resonance taking advantage of injection molding techniques and mechanical shaping of the enclosures. This results in tremendous increases in cabinet volumes which enable better acoustic performance while maintaining the same footprint. Four intelligently positioned handles make the 600 easy to carry and move around. Integrated hardware mounts, designed into the enclosures, allow each model to be flown when required. And indexed feet molded into the enclosures allow for convenient storage and transport, secure stacking for stage monitor and traditional stand up configurations, and unique acoustic configurations.
- ▶ The EON610's extraordinary performance results from a breakthrough approach to waveguide design. Special fluting is designed into the structure that guides the frequencies through the full range of the system. The result is consistent response throughout its 110 degree coverage pattern. The quality and consistency between on axis and off axis response delivers uniform coverage and high intelligibility throughout the coverage area, which means the EON610's smooth, transparent sound is the same for the entire audience.
- ▶ Bluetooth control over DSP Parameters, presets, and master volume allows users to control up to 4 speakers at one time with iOS and android devices. 3 PEQs and a Hi- and Lo-shelf are built into the speaker and accessible via the EON600 app.



## Specifications:

<b>System:</b>	
System Type:	Self powered 10", two-way, bass-reflex
Maximum SPL Output:	124 dB
Frequency Range (-10 dB):	52Hz – 20kHz
Frequency Response (-3 dB):	60Hz – 20kHz
<b>Amplifier:</b>	
System Power Rating:	1000W Peak (700 LF + 300HF); 500W Continuous (350W LF + 150W HF)
Input Impedance:	20k (balanced)
Line Input Gain:	Infinity to 26.8 dBu
Mic Input Gain:	Infinity to 29 dBu
<b>Maximum Input Level:</b>	
Line:	+14dBu
Mic:	-4dBu
Connectors:	2 x Balanced XLR-1/4" combination inputs; 1 x male XLR loop thru out
LED Indicators:	Front Power LED (Defeatable, white) Rear Power LED (Blue), Bluetooth (Blue), EQ+ (Green) Preset (Green) Signal (Green) Limit (Orange)
Cooling:	Passive
AC Power Input:	100-120VAC 50/60Hz; 230-240VAC 50/60Hz
AC Power Consumption (120V~):	1/8th Power – 1.14A (Max), 1/4th Power – 1.71A (Max), 1/3rd Power – 2.03A (Max)
<b>Speaker:</b>	
LF Driver:	1 x JBL 610H 322mm (10 in) woofer
HF Driver:	1 x JBL 2414H-1 25.4mm (1 in) polymer diaphragm, neodymium compression driver
Coverage Pattern:	110 x 60
Crossover Frequency:	1.8kHz
<b>Enclosure:</b>	
Material:	Polypropylene, black
Monitor Angle:	Both sides
Suspension/Mounting:	35mm pole socket, 3 x M10 Suspension points
Handles:	4
Grille:	Powder coated, Obsidian, perforated steel with acoustically transparent black cloth backing
Dimensions (L x W x H):	558 mm x 322 mm x 295 mm (21.968" x 12.677" x 11.614")
Weight:	26 lbs (11.79 kg)
Shipping Weight:	36.0 lbs (15 kg)

## Features:

- ▶ JBL Premium Transducers
- ▶ 1000 W highly efficient Class-D amplification
- ▶ Maximum SPL Output: 126dB
- ▶ System Type: Self powered 12", two-way, bass-reflex
- ▶ Frequency Range (-10dB): 48Hz - 20kHz
- ▶ Frequency Response (-3dB): 57Hz - 20kHz
- ▶ Coverage Pattern: 100 x 60
- ▶ Bluetooth Control
  - 3 Parametric EQs + Hi & Lo Shelf
  - Gain and Delay
  - Save and Recall settings
- ▶ JBL Engineered Application Presets
  - Main
  - Monitor
  - Speech
  - Subwoofer
- ▶ 3 x M10 Suspension Points
- ▶ Standard 35mm pole cup with stabilizing screw
- ▶ Lightweight, rugged polypropylene enclosure

## Applications:

- ▶ The EON612 is a powered portable PA speaker in the EON600 series from JBL Professional. It has been designed to deliver class leading performance in a variety of applications including use as a main PA, a stage monitor, and rear and side fills. A lightweight, highly useful enclosure allows the speaker to be easily transported and set up wherever sound reinforcement is needed.
- ▶ Enclosure designs have been optimized for ideal acoustic resonance taking advantage of injection molding techniques and mechanical shaping of the enclosures. This results in tremendous increases in cabinet volumes which enable better acoustic performance while maintaining the same footprint. Four intelligently positioned handles make the 600 easy to carry and move around. Integrated hardware mounts, designed into the enclosures, allow each model to be flown when required. And indexed feet molded into the enclosures allow for convenient storage and transport, secure stacking for stage monitor and traditional stand up configurations, and unique acoustic configurations.
- ▶ The EON612's extraordinary performance results from a breakthrough approach to waveguide design. Special fluting is designed into the structure that guides the frequencies through the full range of the system. The result is consistent response throughout its 110 degree coverage pattern. The quality and consistency between on axis and off axis response delivers uniform coverage and high intelligibility throughout the coverage area, which means the EON612's smooth, transparent sound is the same for the entire audience.
- ▶ Bluetooth control over DSP Parameters, presets, and master volume allows users to control up to 4 speakers at one time with iOS and android devices. 3 PEQs and a Hi- and Lo-shelf are built into the speaker and accessible via the EON600 app.



## Specifications:

<b>System:</b>	
System Type:	Self powered 12", two-way, bass-reflex
Maximum SPL Output:	126 dB
Frequency Range (-10 dB):	48Hz – 20kHz
Frequency Response (-3 dB):	57Hz – 20kHz
<b>Amplifier:</b>	
System Power Rating:	1000W Peak (700 LF + 300HF); 500W Continuous (350W LF + 150W HF)
Input Impedance:	20k (balanced)
Line Input Gain:	Infinity to 26.8 dBu
Mic Input Gain:	Infinity to 29 dBu
<b>Maximum Input Level:</b>	
Line:	+14dBu
Mic:	-4dBu
Connectors:	2 x Balanced XLR-1/4" combination inputs; 1 x male XLR loop thru out
LED Indicators:	Front Power LED (Defeatable, white) Rear Power LED (Blue), Bluetooth (Blue), EQ+ (Green) Preset (Green) Signal (Green) Limit (Orange)
Cooling:	Passive
AC Power Input:	100-120VAC 50/60Hz; 230-240VAC 50/60Hz
AC Power Consumption (120V~):	1/8th Power – 1.14A (Max), 1/4th Power – 1.71A (Max), 1/3rd Power – 2.03A (Max)
<b>Speaker:</b>	
LF Driver:	1 x JBL 612H 380mm (12 in) woofer
HF Driver:	1 x JBL 2414H-1 25.4mm (1 in) polymer diaphragm, neodymium compression driver
Coverage Pattern:	110 x 60
Crossover Frequency:	1.8kHz
<b>Enclosure:</b>	
Material:	Polypropylene, black
Monitor Angle:	Both sides
Suspension/Mounting:	35mm pole socket, 3 x M10 Suspension points
Handles:	4
Grille:	Powder coated, Obsidian, perforated steel with acoustically transparent black cloth backing
Dimensions (L x W x H):	664 mm x 380 mm x 316 mm (26.14" x 14.96" x 12.44")
Weight:	33 lbs (19 kg)
Shipping Weight:	43.0 lbs (19 kg)

## Features:

- ▶ JBL Premium Transducers
- ▶ 1000 W highly efficient Class-D amplification
- ▶ Maximum SPL Output: 127dB
- ▶ System Type: Self powered 15", two-way, bass-reflex
- ▶ Frequency Range (-10dB): 39Hz - 20kHz
- ▶ Frequency Response (-3 dB): 50Hz - 20kHz
- ▶ Coverage Pattern: 90 x 50
- ▶ Bluetooth Control
  - 3 Parametric EQs + Hi & Lo Shelf
  - Gain and Delay
  - Save and Recall settings
- ▶ JBL Engineered Application Presets
  - Main
  - Monitor
  - Speech
  - Subwoofer
- ▶ 3 x M10 Suspension Points
- ▶ Standard 35mm pole cup with stabilizing screw
- ▶ Lightweight, rugged polypropylene enclosure

## Applications:

- ▶ The EON615 is a powered portable PA speaker in the EON600 series from JBL Professional. It has been designed to deliver class leading performance in a variety of applications including use as a main PA, a stage monitor, and rear and side fills. A lightweight, highly useful enclosure allows the speaker to be easily transported and set up wherever sound reinforcement is needed.
- ▶ Enclosure designs have been optimized for ideal acoustic resonance taking advantage of injection molding techniques and mechanical shaping of the enclosures. This results in tremendous increases in cabinet volumes which enable better acoustic performance while maintaining the same footprint. Four intelligently positioned handles make the 600 easy to carry and move around. Integrated hardware mounts, designed into the enclosures, allow each model to be flown when required. And indexed feet molded into the enclosures allow for convenient storage and transport, secure stacking for stage monitor and traditional stand up configurations, and unique acoustic configurations.
- ▶ The EON615's extraordinary performance results from a breakthrough approach to waveguide design. Special fluting is designed into the structure that guides the frequencies through the full range of the system. The result is consistent response throughout its 110 degree coverage pattern. The quality and consistency between on axis and off axis response delivers uniform coverage and high intelligibility throughout the coverage area, which means the EON615's smooth, transparent sound is the same for the entire audience.
- ▶ Bluetooth control over DSP Parameters, presets, and master volume allows users to control up to 4 speakers at one time with iOS and android devices. 3 PEQs and a Hi- and Lo-shelf are built into the speaker and accessible via the EON600 app.



## Specifications:

<b>System:</b>	
System Type:	Self powered 15", two-way, bass-reflex
Maximum SPL Output:	127 dB
Frequency Range (-10 dB):	39Hz – 20kHz
Frequency Response (-3 dB):	50Hz – 20kHz
<b>Amplifier:</b>	
System Power Rating:	1000W Peak (700 LF + 300HF); 500W Continuous (350W LF + 150W HF)
Input Impedance:	20k (balanced)
Line Input Gain:	Infinity to 26.8 dBu
Mic Input Gain:	Infinity to 29 dBu
Maximum Input Level:	
Line:	+14dBu
Mic:	-4dBu
Connectors:	2 x Balanced XLR-1/4" combination inputs; 1 x male XLR loop thru out
LED Indicators:	Front Power LED (Defeatable, white) Rear Power LED (Blue), Bluetooth (Blue), EQ+ (Green) Preset (Green) Signal (Green) Limit (Orange)
Cooling:	Passive
AC Power Input:	100-120VAC 50/60Hz; 230-240VAC 50/60Hz
AC Power Consumption (120V~):	1/8th Power – 1.14A (Max), 1/4th Power – 1.71A (Max), 1/3rd Power – 2.03A (Max)
<b>Speaker:</b>	
LF Driver:	1 x JBL 615H 380mm (15") woofer with 2" voice coil
HF Driver:	1 x JBL 2414H-1 25.4mm (1 in) polymer diaphragm, neodymium compression driver
Coverage Pattern:	90 x 50
Crossover Frequency:	1.8kHz
<b>Enclosure:</b>	
Material:	Polypropylene, black
Monitor Angle:	Both sides
Suspension/Mounting:	35mm pole socket, 3 x M10 Suspension points
Handles:	4
Grille:	Powder coated, Obsidian, perforated steel with acoustically transparent black cloth backing
Dimensions (L x W x H):	707mm x 439mm x 365mm (27.8" x 17.3" x 14.4")
Weight:	39 lbs (17.6 kg)
Shipping Weight:	49.0 lbs (22 kg)

## Features:

- ▶ JBL Premium Transducers
- ▶ 1000 W highly efficient Class-D amplification
- ▶ Maximum SPL Output: 134dB
- ▶ System Type: Self powered 18" Subwoofer
- ▶ Frequency Range (-10dB): 31Hz - 150Hz
- ▶ Frequency Response (-3dB): 42.5Hz - 150Hz
- ▶ Bluetooth Control
  - 3 Parametric EQs + Hi & Lo Shelf
  - Gain and Delay
  - Save and Recall settings
  - Polarity Inversion
- ▶ JBL Engineered Crossover Presets
  - 80 Hz
  - 100 Hz
  - 120 Hz
  - EON
- ▶ M20 Pole Cup
- ▶ Rugged, stage-ready Duraflex enclosure

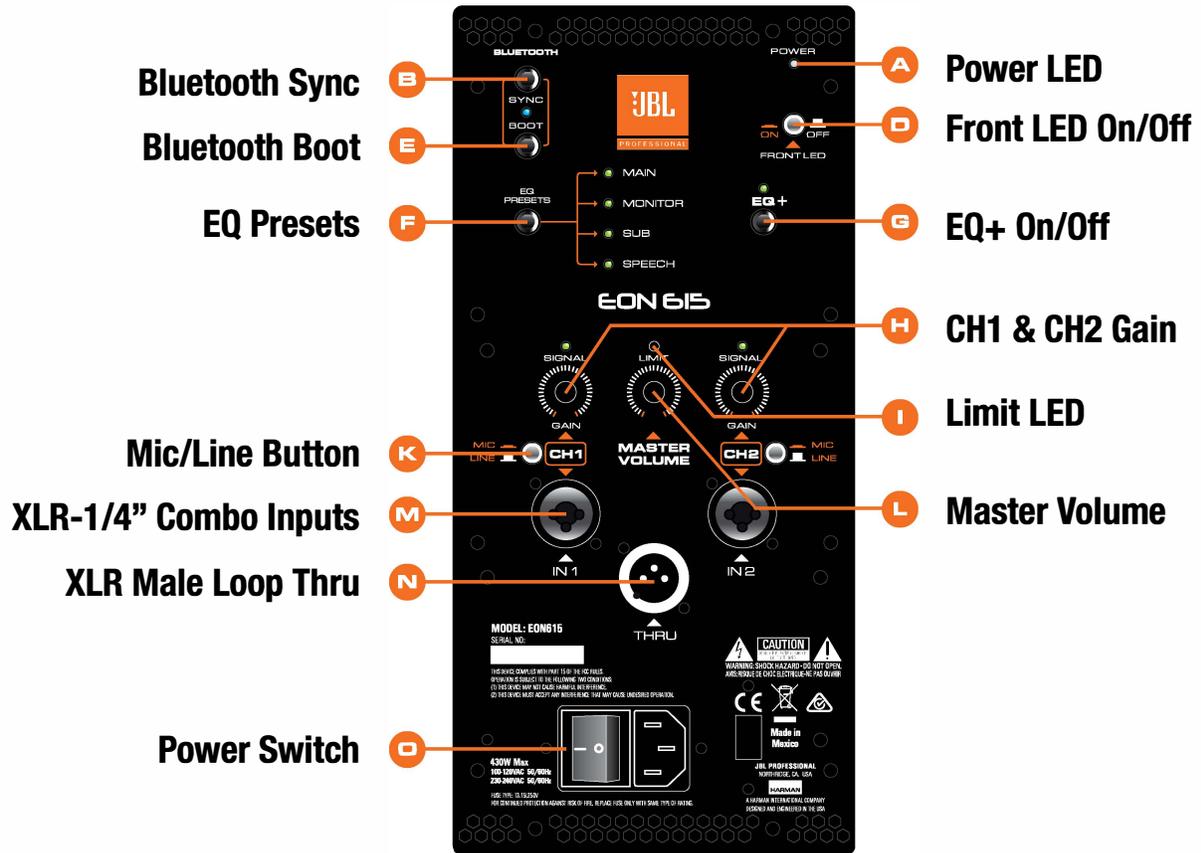
## Applications:

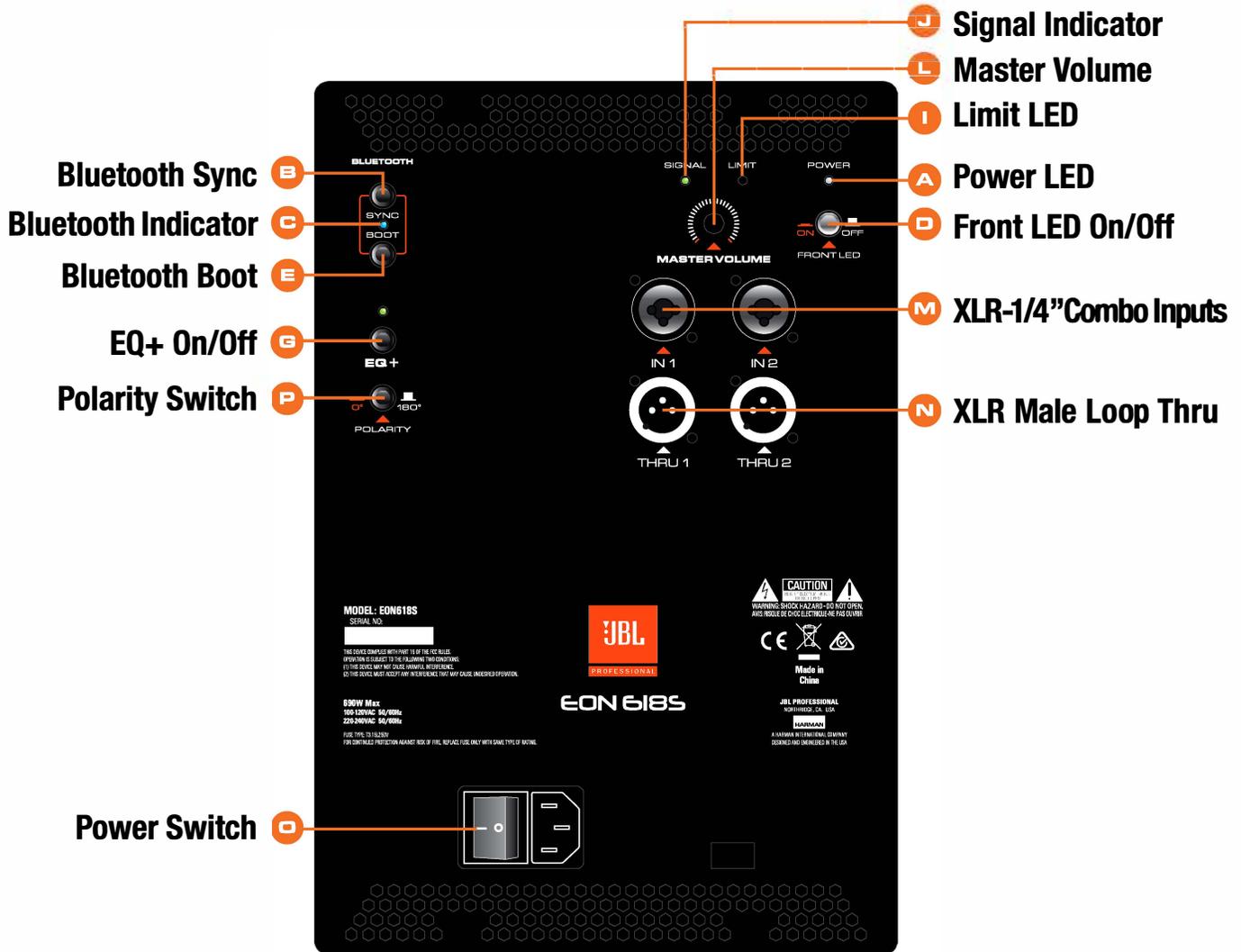
- ▶ The EON618S is a powered portable PA subwoofer in the EON600 series from JBL Professional. It has been designed to deliver class leading performance in a variety of applications supporting EON600 and other full range systems. A lightweight, highly useful enclosure allows the speaker to be easily transported and set up wherever low frequency reinforcement is needed.
- ▶ The EON618S enclosure has been designed to maximize cabinet volume while maintaining a highly transportable footprint. This has led to extraordinary Low Frequency production, making the EON618S the loudest, lowest, cleanest subwoofer in its class
- ▶ Selectable crossover presets are available through the EON Connect app. By default, the EON618S uses the "EON" tuning, which is a 100 Hz crossover that has been specifically tuned to compliment the full range EON600 speakers. Generic 80Hz, 100Hz, and 120Hz tunings are also available for use with other full range systems.
- ▶ Bluetooth control over DSP Parameters, presets, and master volume allows users to control up to 4 speakers at one time with iOS and android devices. Polarity inversion, 3 PEQs, and a Hi- and Lo-shelf are built into the speaker and accessible via the EON Connect app.



## Specifications:

<b>System:</b>	
System Type:	Self powered 18" Subwoofer
Maximum SPL Output:	134 dB
Frequency Range (-10 dB):	31Hz – 150Hz
Frequency Response (-3 dB):	42.5Hz – 150Hz
<b>Amplifier:</b>	
System Power Rating:	1000W Peak, 500W Continuous
Input Impedance:	22k (balanced)
Line Input Gain:	0 to 36 dBu
Mic Input Gain:	-
<b>Maximum Input Level:</b>	
Line:	+14dBu
Mic:	-
Connectors:	2 x Balanced XLR-1/4" combination inputs; 2 x male XLR loop thru out
LED Indicators:	Front Power LED (Defeatable, white) Rear Power LED (White), Bluetooth (Blue), EQ+ (Green) Preset (Green) Signal (Green) Limit (Orange)
Cooling:	Passive
AC Power Input:	100-120VAC 50/60Hz; 230-240VAC 50/60Hz
AC Power Consumption (120V~):	1/8th Power – 1.14A (Max), 1/4th Power – 1.71A (Max), 1/3rd Power – 2.03A (Max)
<b>Speaker:</b>	
LF Driver:	1 x JBL 618H 457mm (18") woofer with 2" voice coil
HF Driver:	-
Coverage Pattern:	-
Crossover Frequency:	Selectable; 80 Hz, 100 Hz, or 120 Hz
<b>Enclosure:</b>	
Material:	Duraflex coated wooden enclosure
Monitor Angle:	-
Suspension/Mounting:	M20 Threaded Pole Cup
Handles:	2
Grille:	Powder coated, Obsidian, perforated steel with acoustically transparent black cloth backing
Dimensions (L x W x H):	582mm x 668mm x 645mm (22.9" x 26.3" x 25.4")
Shipping Dimensions (L x W x H):	803mm x 768mm x 631mm (31.6" x 30.2" x 25.1")
Weight:	78.2 lbs (35.5 kg)
Shipping Weight:	91.0 lbs (41.2 kg)





## A. Power LED

This LED (White) lights to indicate that the speaker is plugged in and switched ON.

## B. Bluetooth Sync

Depress this button in order to initiate pairing with your Bluetooth enable device.

## C. Bluetooth Indicator

This LED will illuminate blue to indicate that your Bluetooth connection is established.

## D. Front LED On/Off

Toggles the LED (Blue) on front of speaker On or Off.

## E. Bluetooth Boot

Depress this button to reset the pairing with your Bluetooth enabled device without having to turn the speaker off.

## F. EQ Presets (Full-Range Only)

Use this button to toggle through the four different settings.

### MAIN:

This is the default setting for the EON600 loudspeakers. Use this setting when your EON600 loudspeaker is being used either on a tripod or pole and facing towards your audience.

### MONITOR:

Use this setting when your EON600 loudspeaker is being used as a stage monitor facing towards you.

### SUB:

Use this setting when your EON600 loudspeaker is being used in conjunction with a separate subwoofer. This preset enables a High Pass Filter (HPF) set at 100Hz.

### SPEECH:

Use this setting when your EON600 loudspeaker is being used for Speech only or Spoken Word only applications and is facing towards the audience.

## G. EQ+ Button

Once enabled via the app, the EQ+ toggles the applied EQ settings on/off.

## H. CH1 & CH2 Gain (Full-Range Only)

Controls the gain of CH1 & CH2 respectively. By turning the signal counter-clockwise you will be lowering the gain of your source material. By turning the control clockwise you will be increasing the gain.

## I. Limit Indicator

The LIMIT LED (Red) illuminates to indicate that the system is approaching limit. If this LED is on for more than the duration of brief dynamic peaks, the system is being over-driven. Continuously over-driving the system will

result in unpleasant and fatiguing distortion and may lead to premature failure of your speaker system.

## J. Signal Indicators

The SIGNAL LEDs (Green) illuminates to indicate a usable signal is present at connected INPUTS.

## K. Mic/Line Toggle (Full-Range Only)

The MIC/LINE buttons selects between two sensitivity ranges. The buttons are used to match the input sensitivity with the output level of the devices connected to CH1 or CH2. Depressing the MIC/LINE switch selects MIC (High Sensitivity).

CAUTION: Before adjusting this switch, be certain to rotate the control fully counter-clockwise. After the MIC/LINE switch has been depressed, slowly rotate the control clock-wise until the desired volume has been reached.

- Use the MIC position (depressed) when a microphone is connected.
- Use the LINE position (disengaged) when a line level source such as an audio mixing console, audio playback device or electronic musical instrument is connected.

## L. Master Volume

Controls the master volume of the unit. By turning the knob counter-clockwise you will be lowering the overall volume of the speaker. By turning the control clockwise you will be increasing the overall volume of the speaker.

## M. XLR-1/4" Combo Inputs

These balanced inputs accepts a standard XLR (female) connector and also a 1/4" TRS phone plug. A broad range of signals from microphones, audio mixing consoles and electronic musical instruments may be connected here. The sensitivity of these inputs are controlled by the MIC/LINE SWITCHES.

## N. XLR Male Loop Thru

This XLR (male) output connector provides a method of sending audio out to an external source. If signal is present on both inputs, the inputs will be summed and sent out as a 50/50 mix

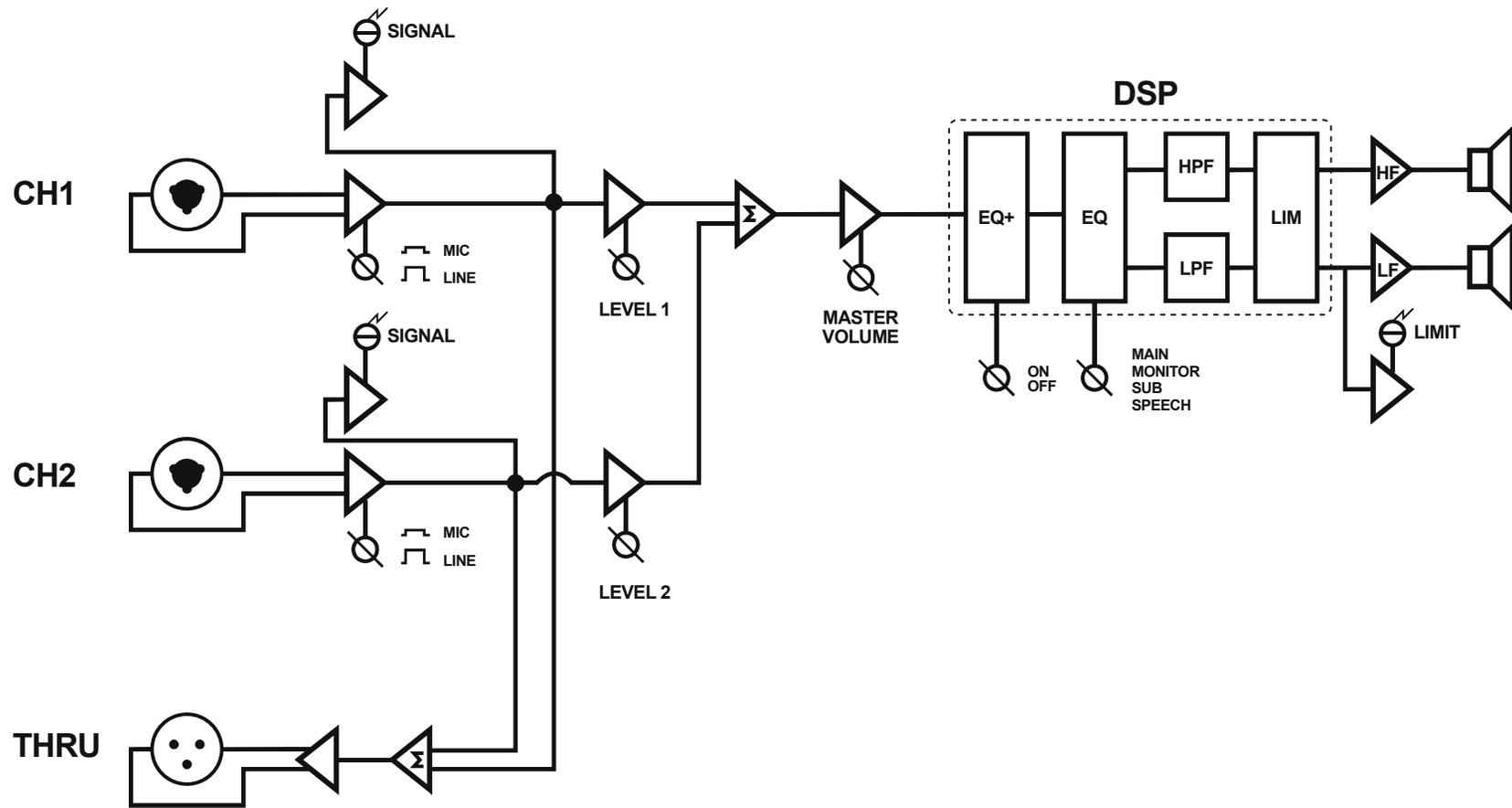
## O. Power Switch

Enables the AC power to the unit on and off.

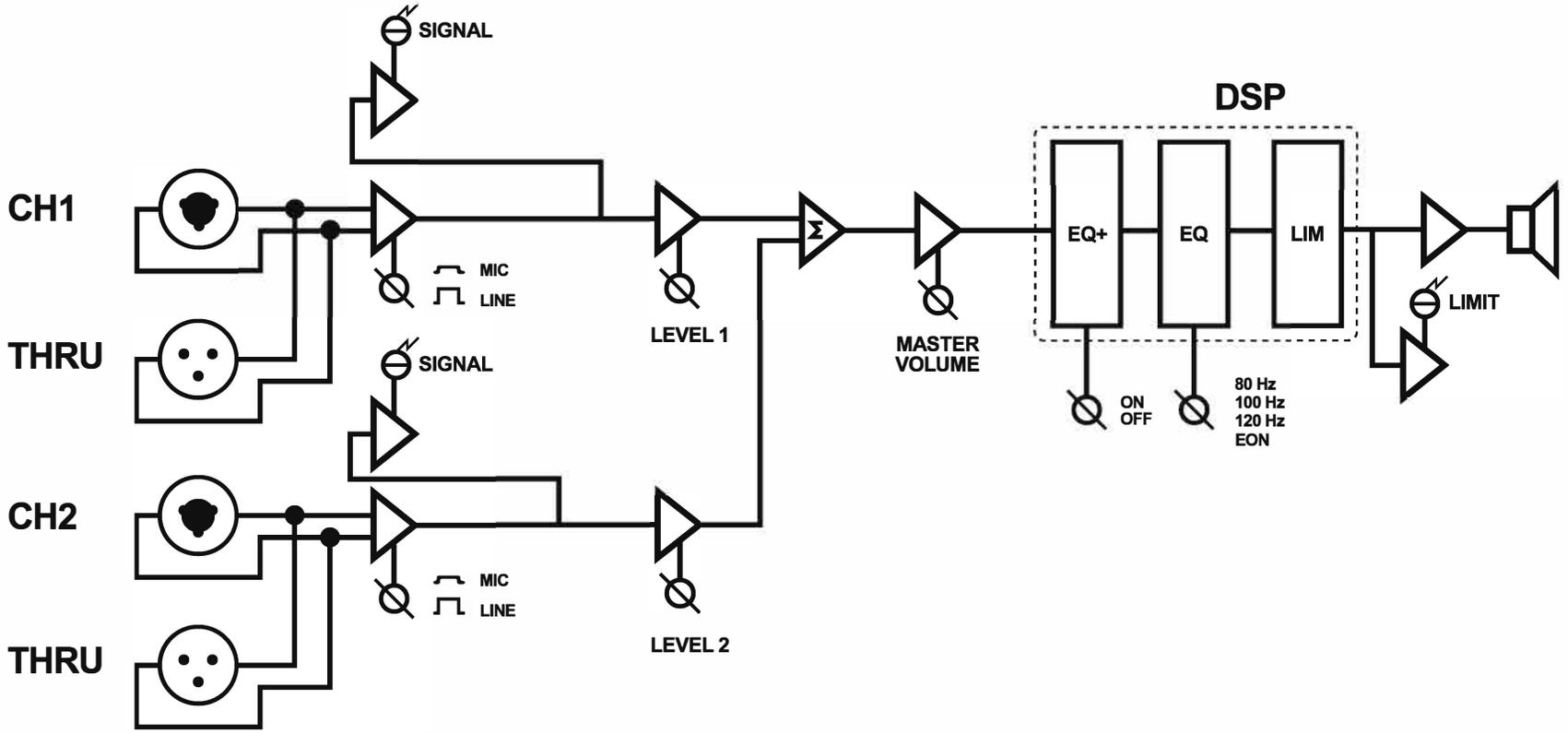
## P. Polarity Switch (Subwoofer Only)

Switches the polarity of the subwoofer between 0 and 180 degrees. Useful for correcting summing issues between the subwoofer and the top boxes. Users should experiment with the switch at both positions and select the best sounding option for their specific application.

Symptom	Likely Cause	What to do
No sound	Speaker not connected to active AC power	Verify that speaker is connected and that the circuit is on
	Power not switched on	Switch on power and verify that power LED is on
No sound, speaker is connected to working AC power but won't come on.	Speaker power cable is faulty or improperly connected.	<ul style="list-style-type: none"> <li>• Re-seat the power cable at both ends.</li> <li>• Substitute a known-good power cable</li> </ul>
No sound. Speaker comes on.	Signal source (mixer, instrument, etc.) is not sending.	<ul style="list-style-type: none"> <li>• Check VU meters on the source mixer</li> <li>• Verify that the tape or CD is playing.</li> <li>• Use headphones to verify that the instrument is actually sending an audio signal</li> </ul>
	Faulty cables and connections	<ul style="list-style-type: none"> <li>• Disconnect and re-seat signal cables.</li> <li>• Replace suspected cable with a known-good cable</li> </ul>
No sound with microphone connected directly to the MIC/ LINE input.	Microphone requires phantom power	The EON does not supply phantom power. Switch to a dynamic microphone, use a battery powered microphone (if possible), use an external phantom power supply for condenser type microphones.
Signal sounds distorted and very loud, PEAK light is lit most of the time.	Excessive input signal, trying to exceed the capabilities of the speakers	<ul style="list-style-type: none"> <li>• Reduce the output level of the source.</li> <li>• Turn down the level controls on the speaker.</li> <li>• Use additional EON speakers.</li> </ul>
Signal sounds distorted even at moderate volumes, LIMIT light is not lit.	Mixer or other source is overdriven	<p>Review the Owner's Manual for your mixer and adjust controls as needed.</p> <ul style="list-style-type: none"> <li>• Input sensitivity (gain)</li> <li>• Channel faders</li> <li>• Master faders Once this is done, review the instructions in the Quick Start section of this guide.</li> </ul>
Lots of hiss in the sound, the mixer controls are at very low settings.	Improper gain structure	<ul style="list-style-type: none"> <li>• Make sure that the MIC/LINE switch is in the LINE (disengaged) position.</li> <li>• Reduce the level settings at speaker. Review the Owner's Manual for your mixer and adjust controls as needed.</li> <li>• Input sensitivity (gain)</li> <li>• Channel faders</li> <li>• Master faders</li> </ul>
Noise or hiss heard at output.	Noisy source device	Disconnect the devices that are connected to your speaker one at a time. If the noise goes away, the problem is with the source or the connecting cable.
Hum or Buzz that increases or decreases when the mixer level controls are moved.	Improper A/C ground or faulty equipment connected to mixer input	Disconnect or mute channels one at a time to isolate the problem. Refer to the owner's manual of the faulty equipment for troubleshooting help.
	Faulty cable between source equipment and mixer	Substitute a known-good cable for the suspected faulty cable.
Hum or Buzz	Improper A/C grounding, ground loops	<ul style="list-style-type: none"> <li>• 'Lift' the audio ground by using an XLR/F to XLR/M adapter on one end.</li> <li>• Re-route audio cables away from AC power and lighting cables.</li> </ul>
	Excessively long unbalanced cable run	<ul style="list-style-type: none"> <li>• Use the balanced outputs (if available) of your mixer or source equipment to drive your EON speakers.</li> <li>• Use a "DI" (direct injection) box to convert your unbalanced equipment output to a balanced output.</li> </ul>
	Improper system gain structure	Reduce the INPUT level controls and increase the output level of your source devices.

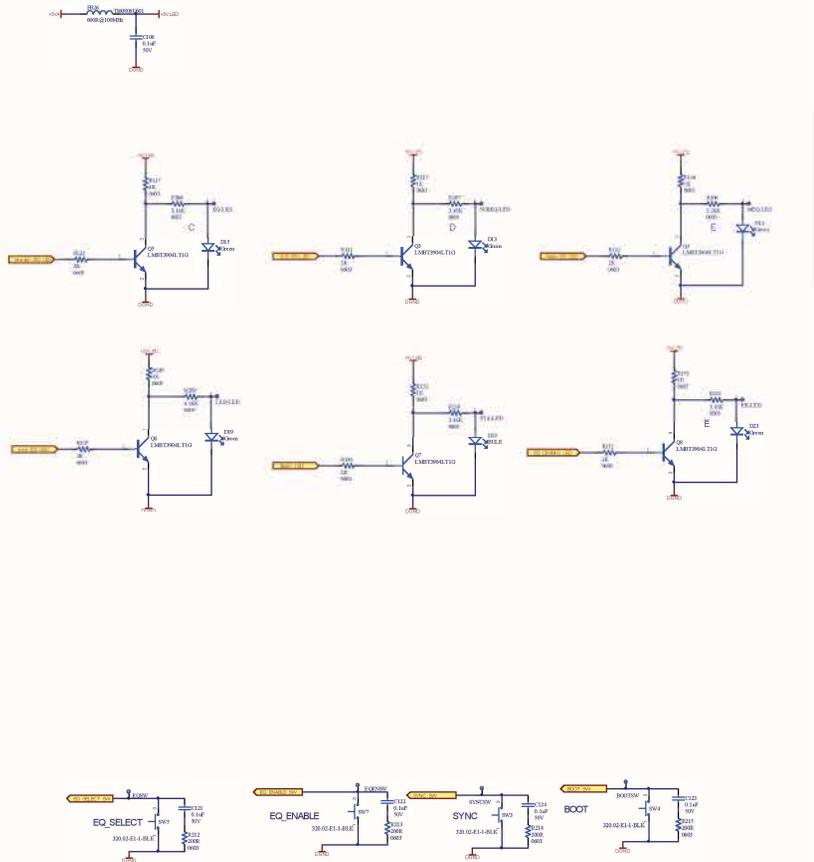


EON610 EON612 EON615

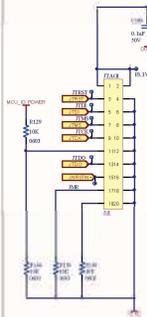


EON618S

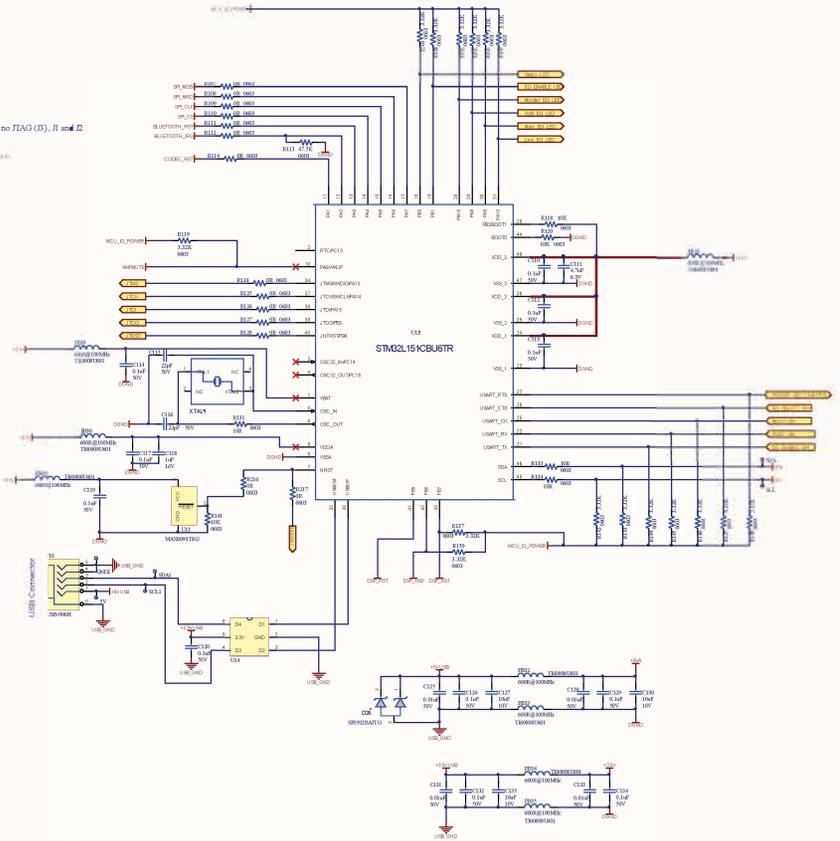
### SWITCHES and LED Controls



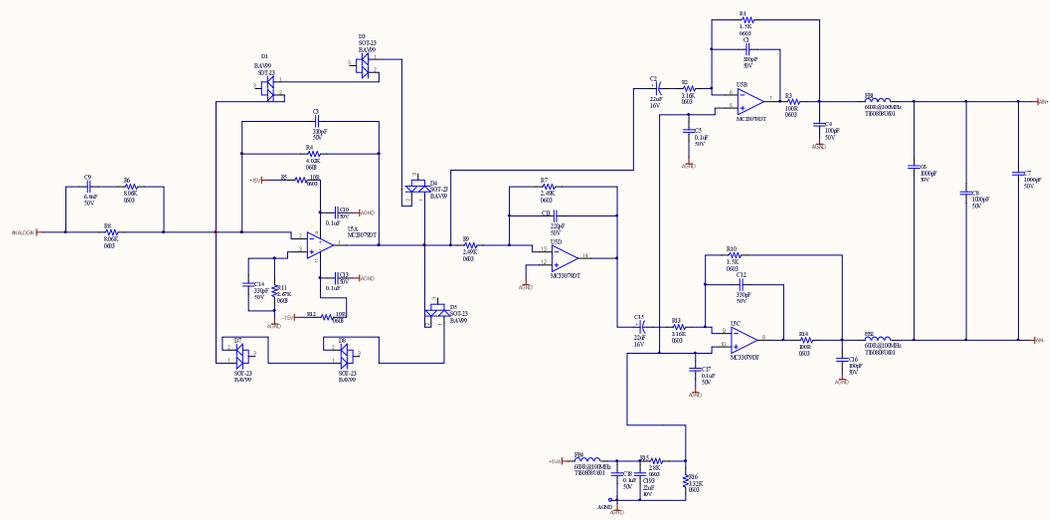
When Using JTAG (E) close J1 open J2, in target board no JTAG (E), J1 and J2



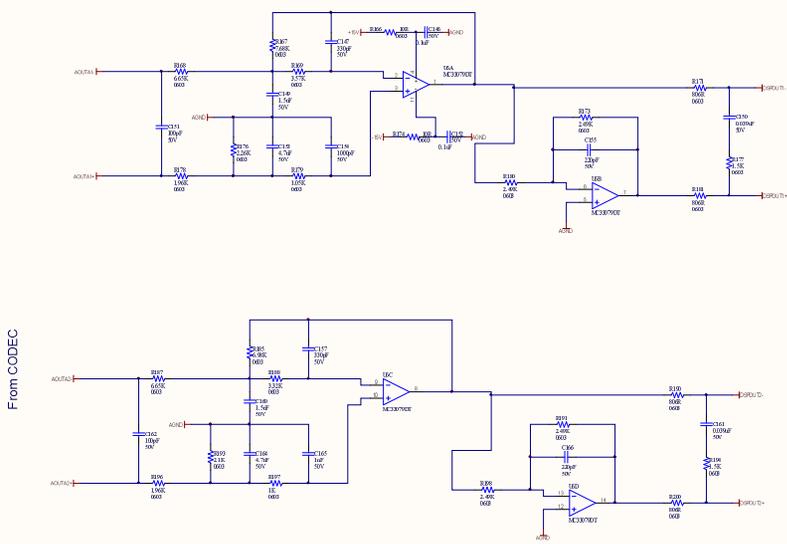
All unused I/O should be configured as analog input and all decoupling caps should be put as close as possible to the micro



JBL Professional			
EON 600			
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File	File No.	Version	Rev. No.
Filename	CPU_SchDoc	Doc	V 2

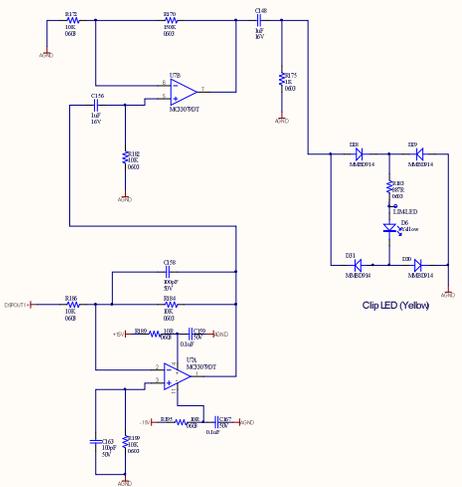


<b>JBL Professional</b>			
<b>EON600</b>			
Size	Page	Rev.	
D	ADC Limiter and Pre-emphasis.SchDoc	V2	
Date	File No.	Entered	Wks. Shgs.
Filename	ADC Limiter and Pre-emphasis.SchDoc	Sheet	2 of 7



To 26 PIN Connector

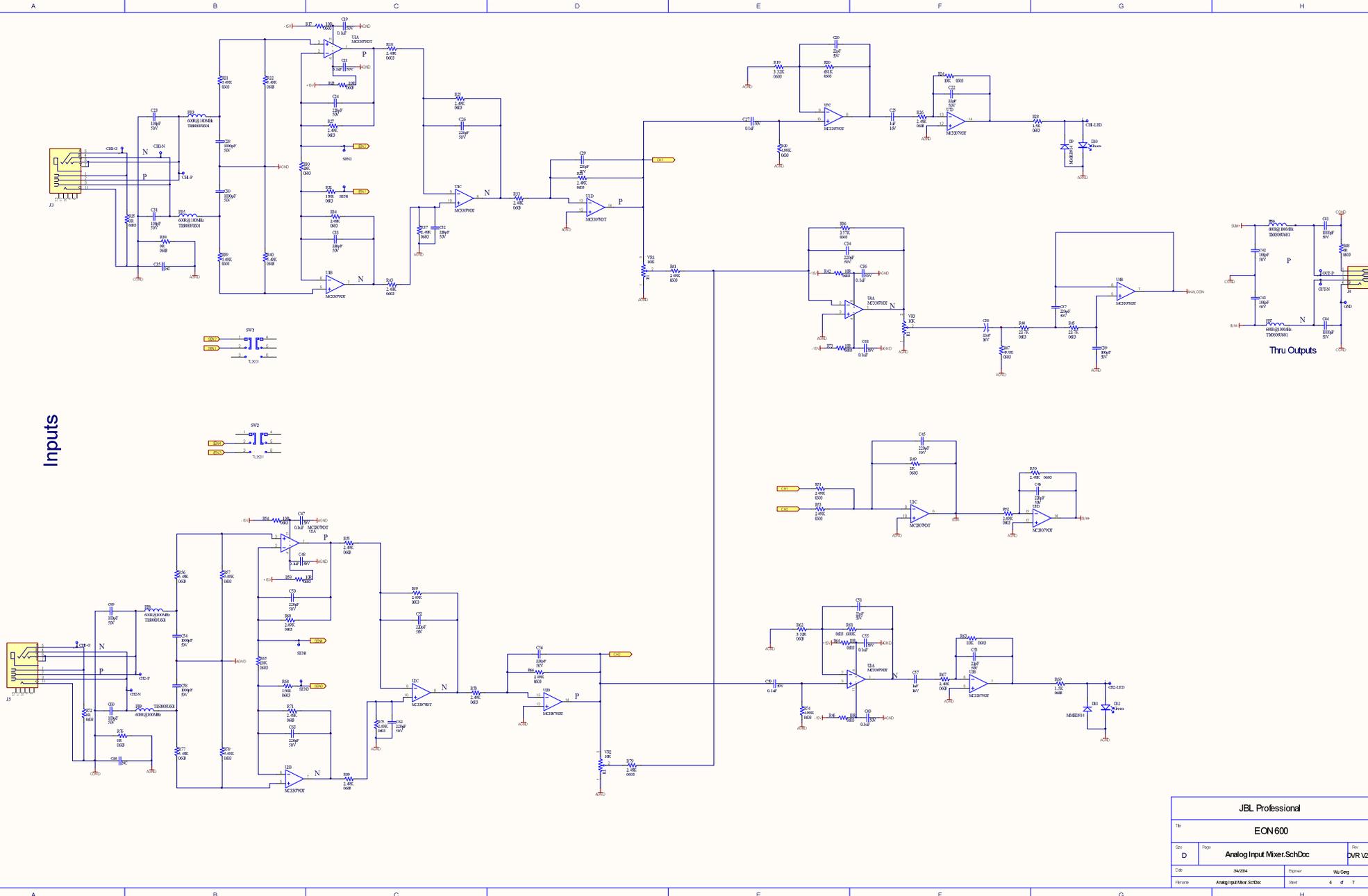
This is a comparator configuration. Monitors the DAC/CLP/DAC and when near saturation (+/- 1.20V pk) outputs a square wave. The threshold is set by the resistor network at the (+) input.



From CODEC

JBL Professional			
EON600			
Sheet	Page	Of	Rev
D	Output Filters.SchDoc	3	V2
Date	File No.	Author	Ver
	Output Filters.SchDoc		
Filename		Sheet	3 of 7

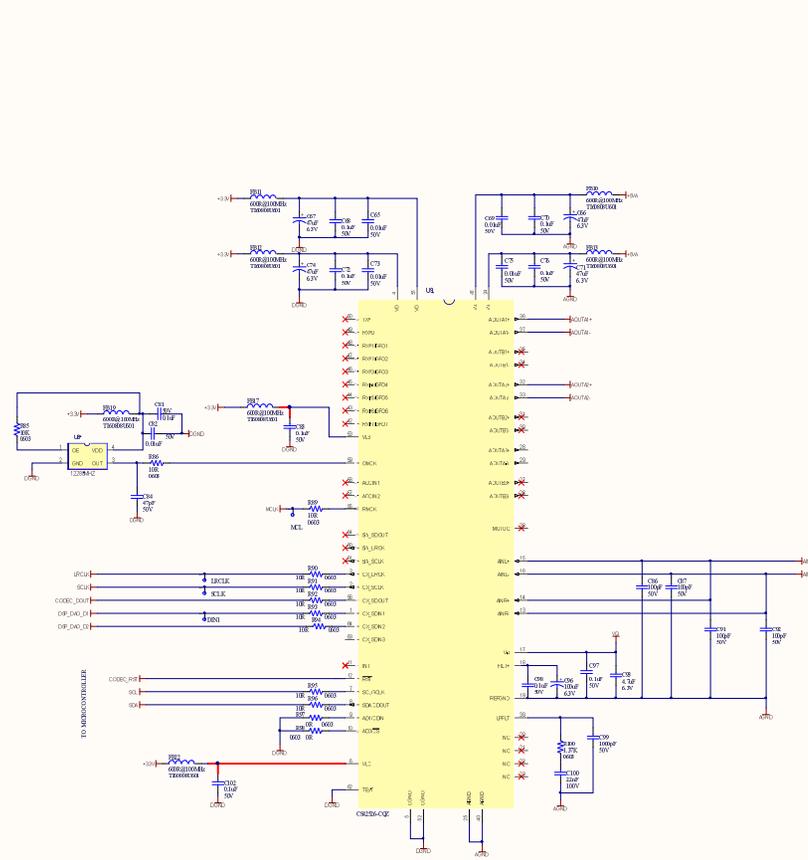
Inputs



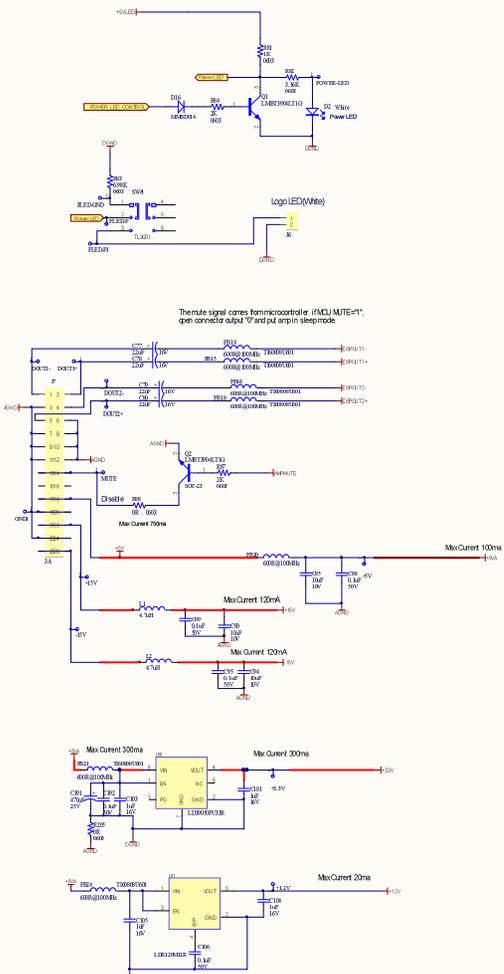
<b>JBL Professional</b>			
<b>EON600</b>			
Sheet	Page	Doc	Rev
D	1	Analog Input Mixer.Sch.Doc	DVR V2.0
Date	2/22/04	Entered	Wb-Snp
Filename	Analog Input Mixer.Sch.Doc	Sheet	4 of 7



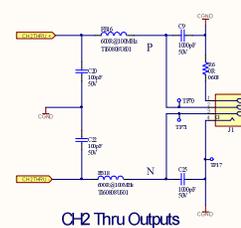
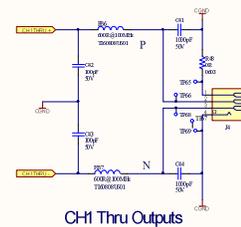
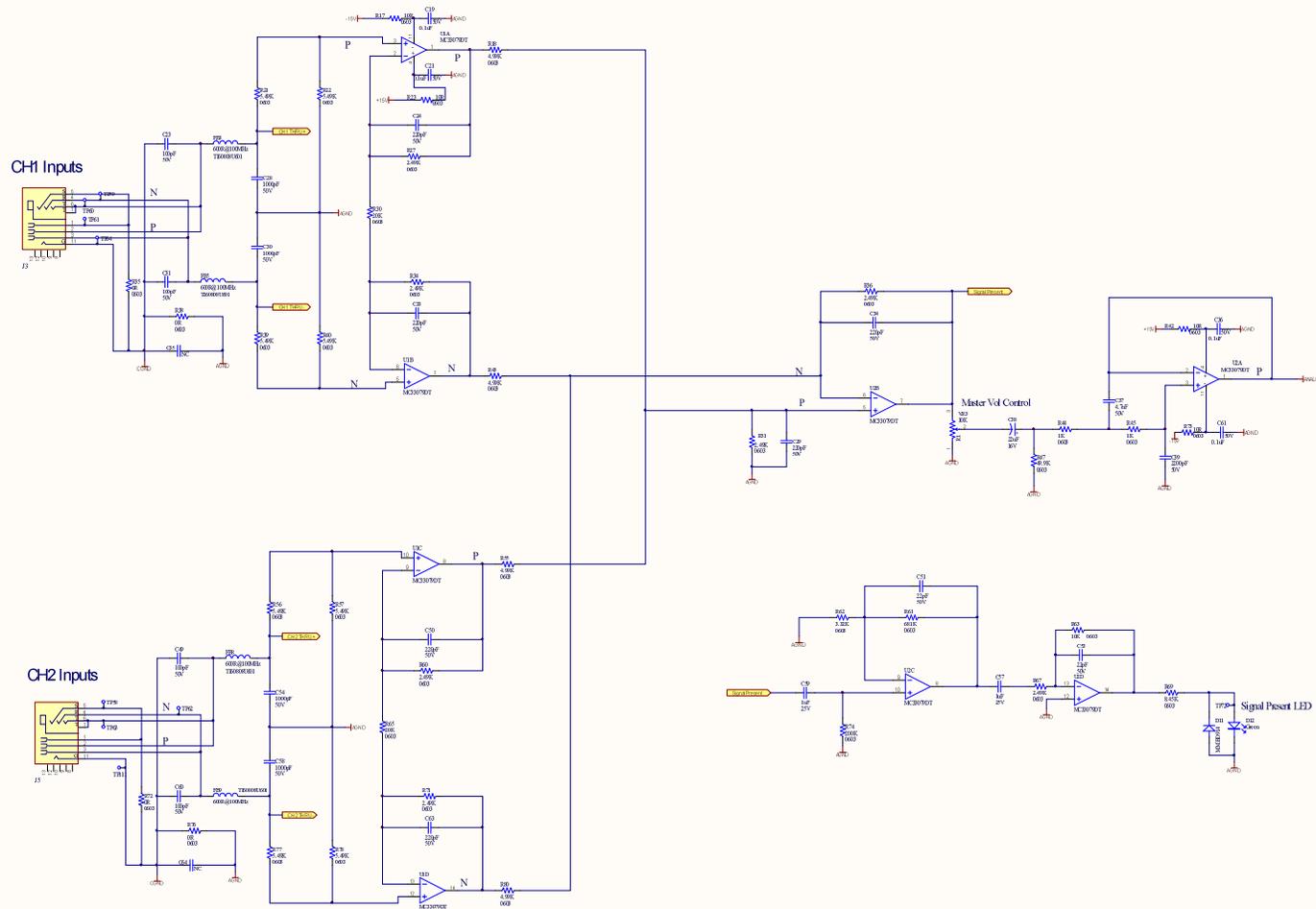




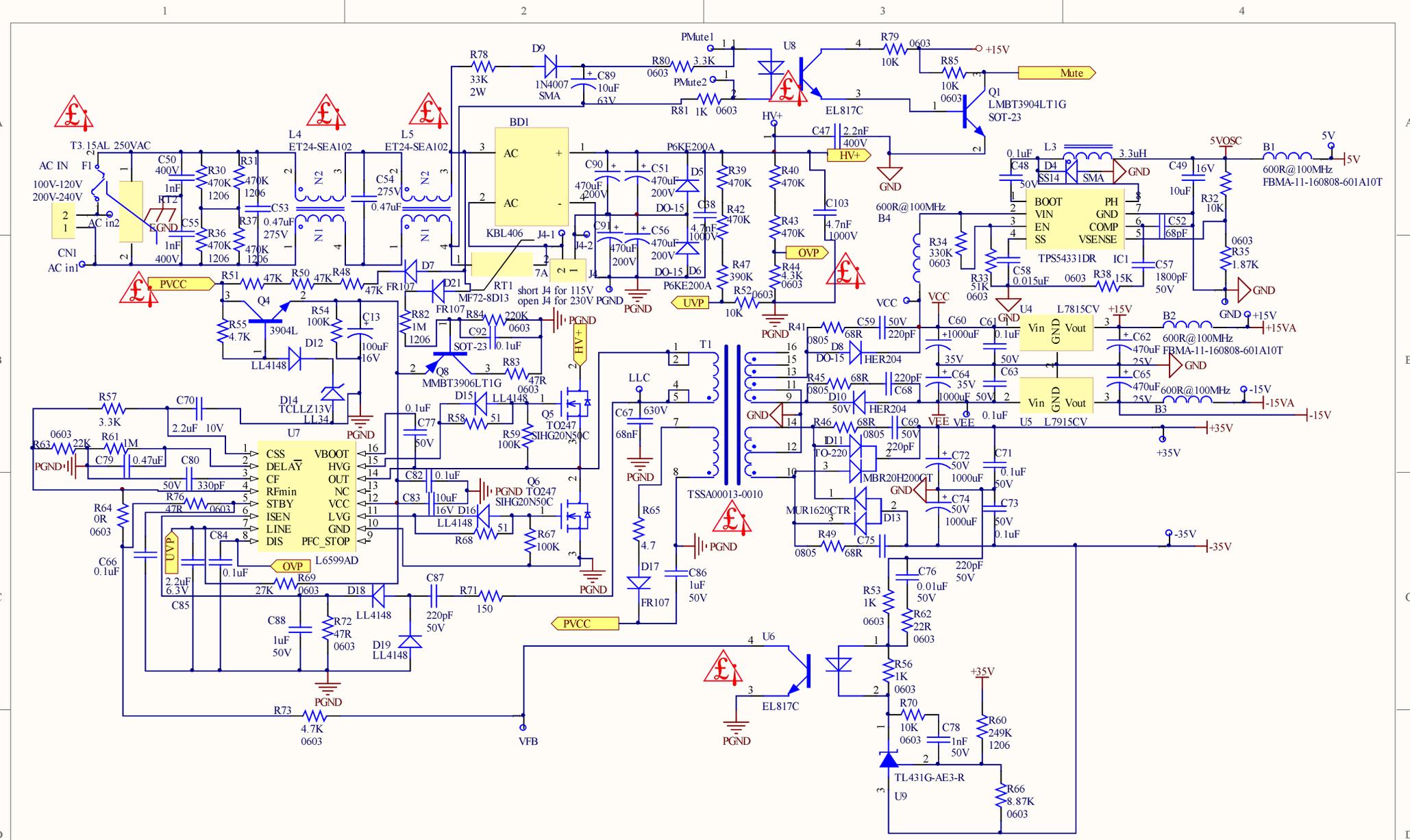
Route DAO\_1\_F to AOUT4+/-, DAO\_2\_F to AOUT2+/- and DAO\_3\_F to AOUT3+/-  
 Slave IC address: WRITE 0008 READ 0009  
 When BTM music stream presents, set CODEC\_SP as slave otherwise set CODEC\_SP as Master



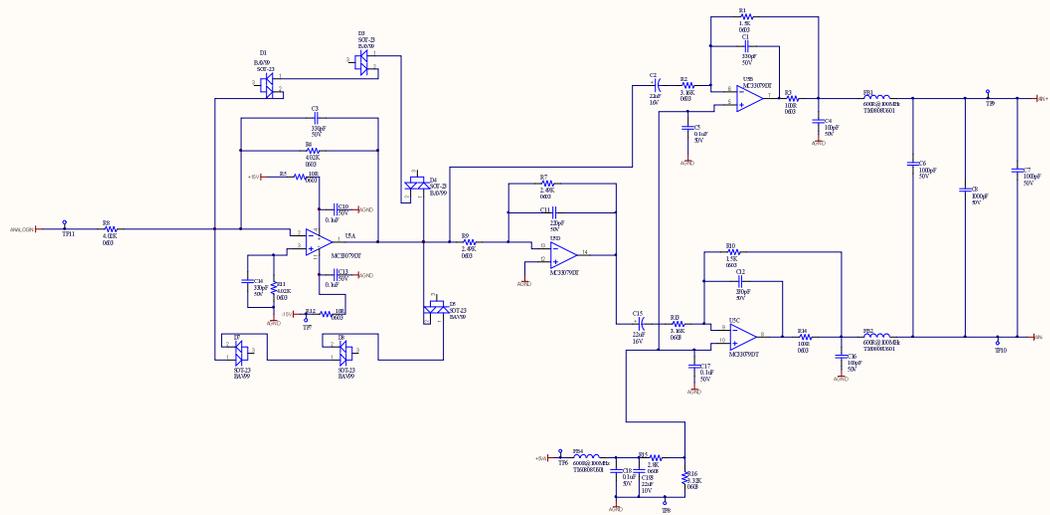
JBL Professional			
EON600			
Rev	Page	Rev	
D	Codec and Power management.SchDoc	V2	



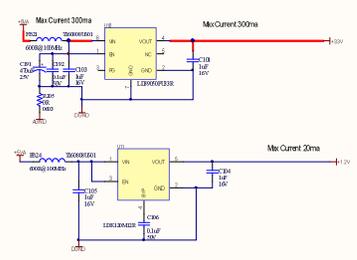
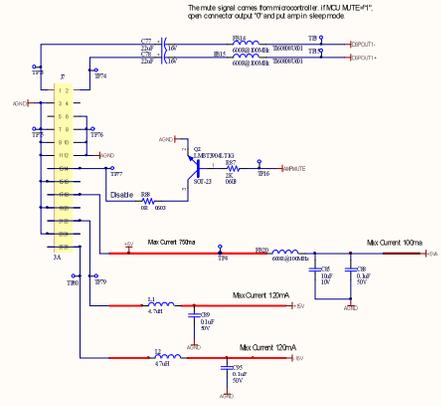
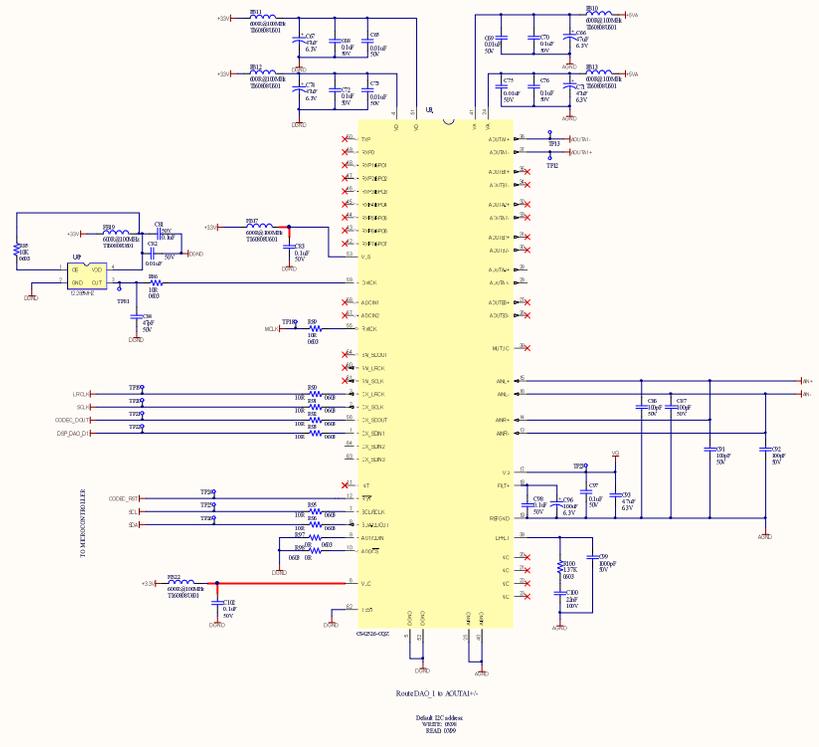
JBL Professional			
EON 600 SUB			
Doc	Page	Rev	
D	1	2.0	
Date	May 6, 2015	Entered	Wls/Strg
Filename	Analog Input Mixer.SchDoc	Sheet	1 of 1



Title SMPS-EON600		
Size: A4	Sub Assy: xxxxxxxx	Revision: V0.1.1
Date: 1/28/2016	Time: 4:36:41 PM	Sheet 1 of 1
File:		



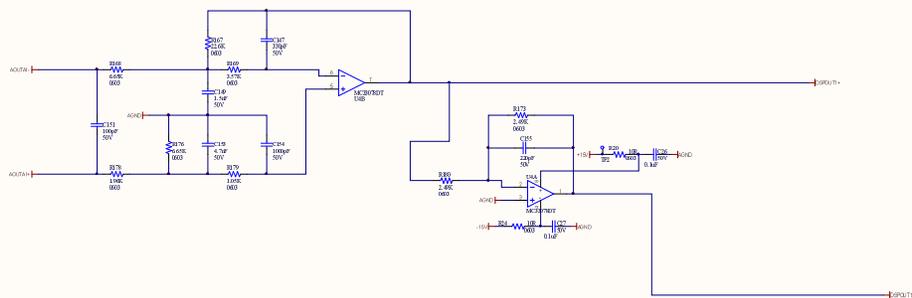
<b>JBL Professional</b>			
Title: <b>EON600 SUB</b>			
Sheet:	Page:	Rev:	
<b>D</b>	<b>ADC Limiter.SchDoc</b>	<b>2.0</b>	
Date:	May 6, 2015	Entered:	Wes Strup
Filename:	ADC Limiter.SchDoc	Sheet:	2 of 7



<b>JBL Professional</b>			
<b>EON600 SUB</b>			
Rev:	D	Page:	Codec and Power management.SchDoc
Rev:		Page:	2.0
Rev:		Date:	May 5, 2015
Rev:		Author:	Wes Strub
Rev:		Checked:	3 of 7

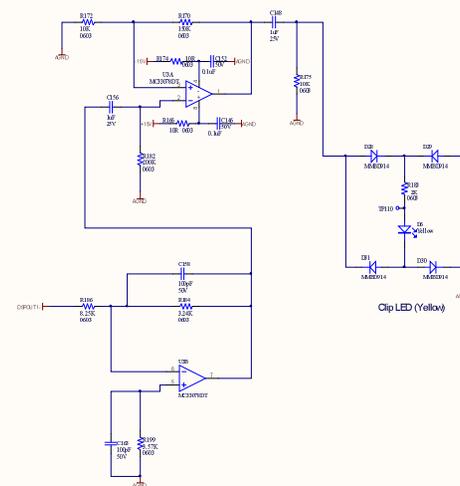


From CODEC



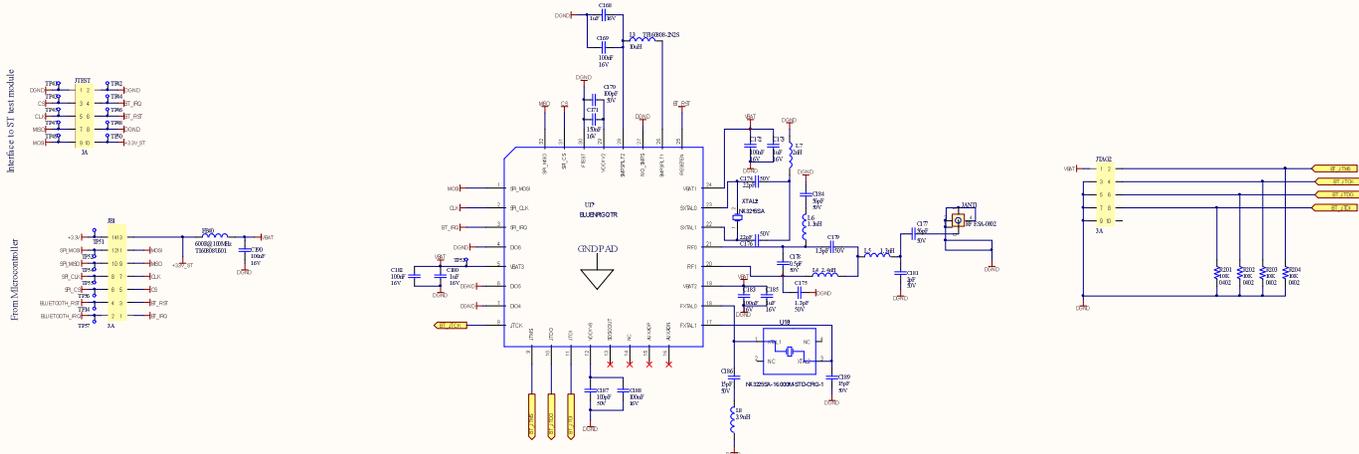
To 26 Pin Connector

This is a comparator configuration. Monitors the DACCLPDAC and when near saturation ( $\approx -1.20V$  pk) outputs a square wave. The threshold is set by the resistor network at the (+) input.

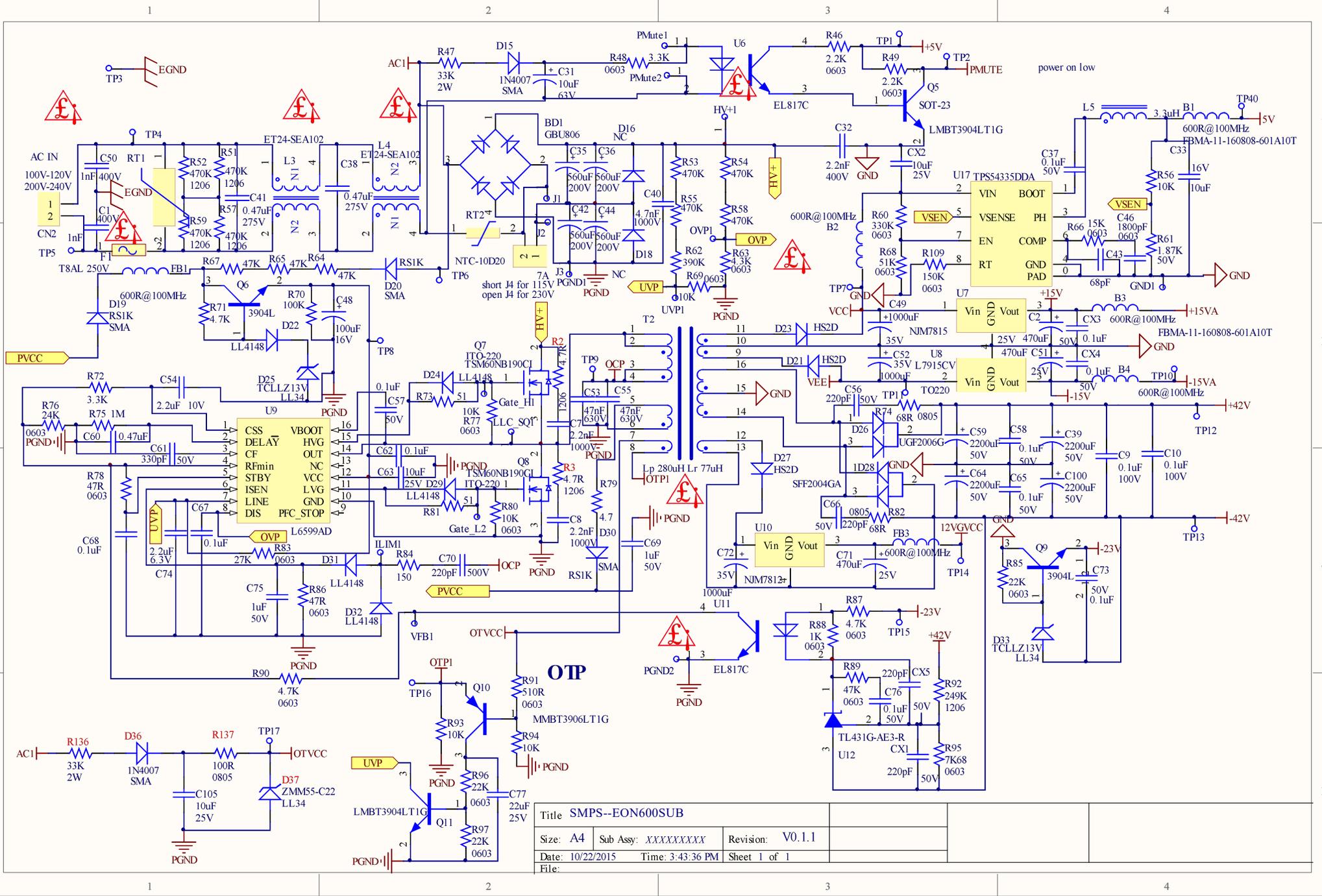


<b>JBL Professional</b>			
<b>EON 600 SUB</b>			
Sheet	Page	Rev.	
D	Output Filters.SchDoc	2.0	
Date	May 6, 2015	Entered	Wes Strup
Filename	Output Filters.SchDoc	Sheet	5 of 7

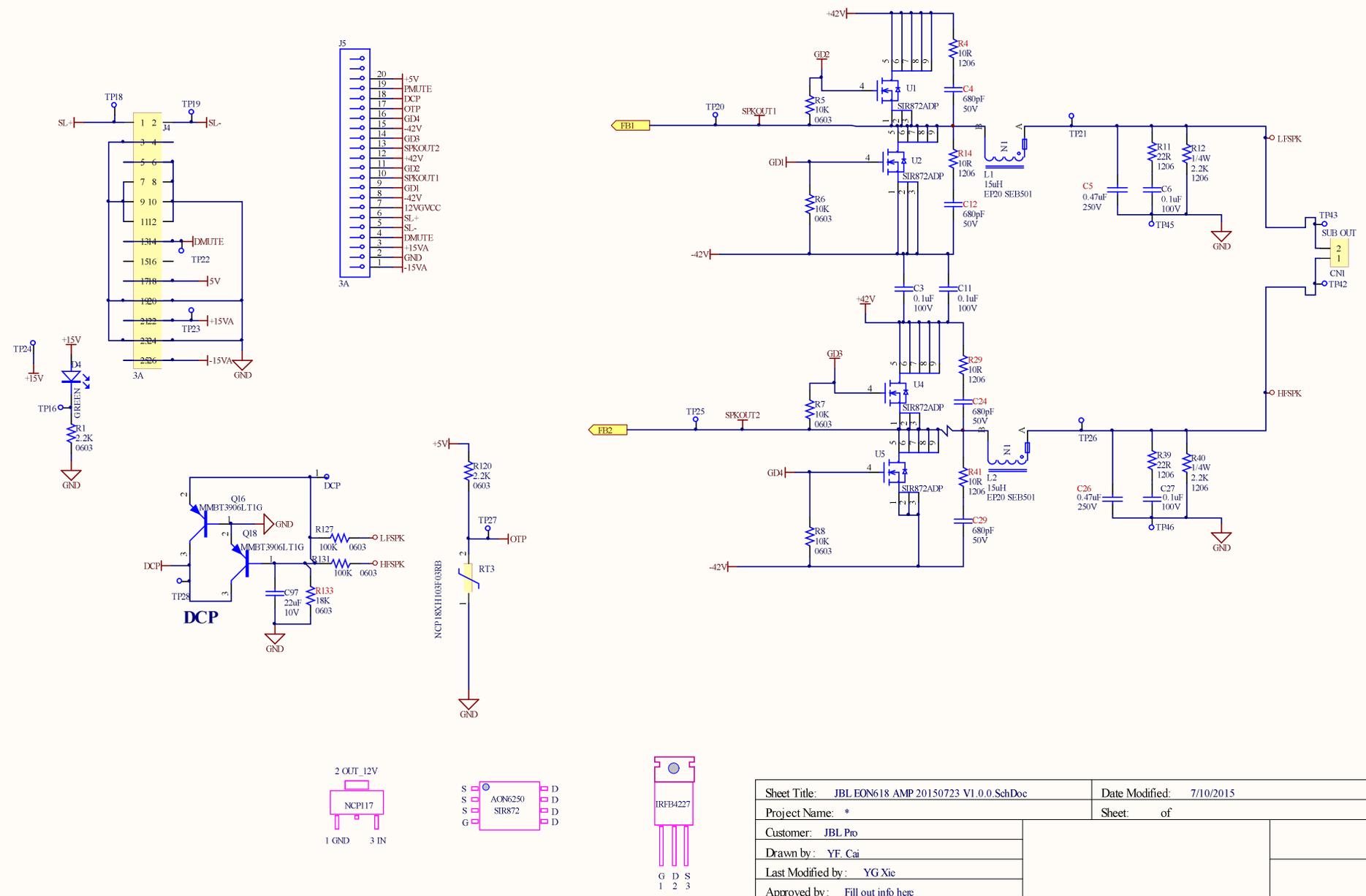




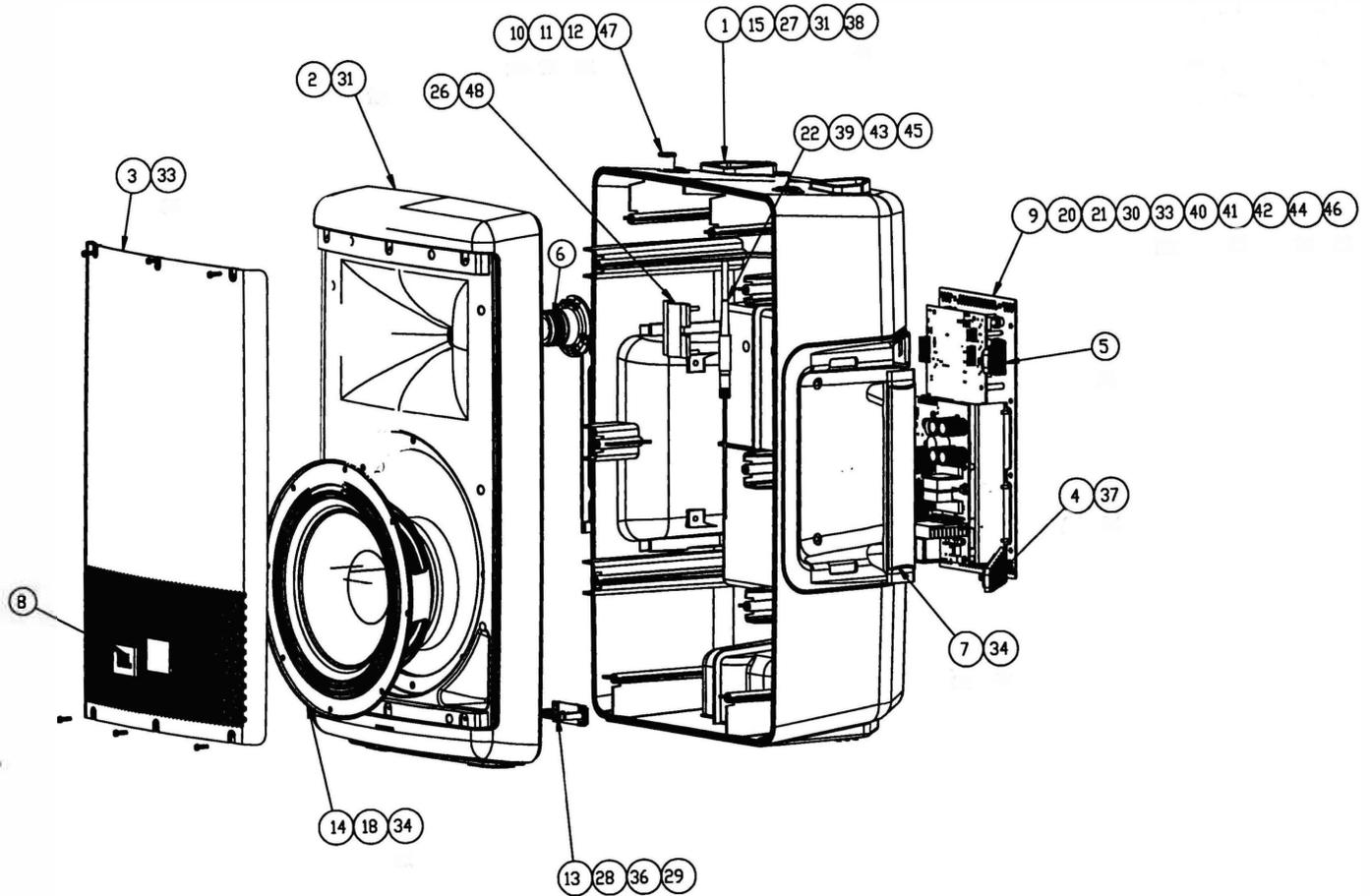
<b>JBL Professional</b>			
<b>EON600 SUB</b>			
Doc	Page	Rev	
D	Bluetooth Module.SchDoc	2.0	
Ctrl	May 6, 2020	Entered	Wb.Sng
Filename	Bluetooth Module.SchDoc	Sheet	7 of 7

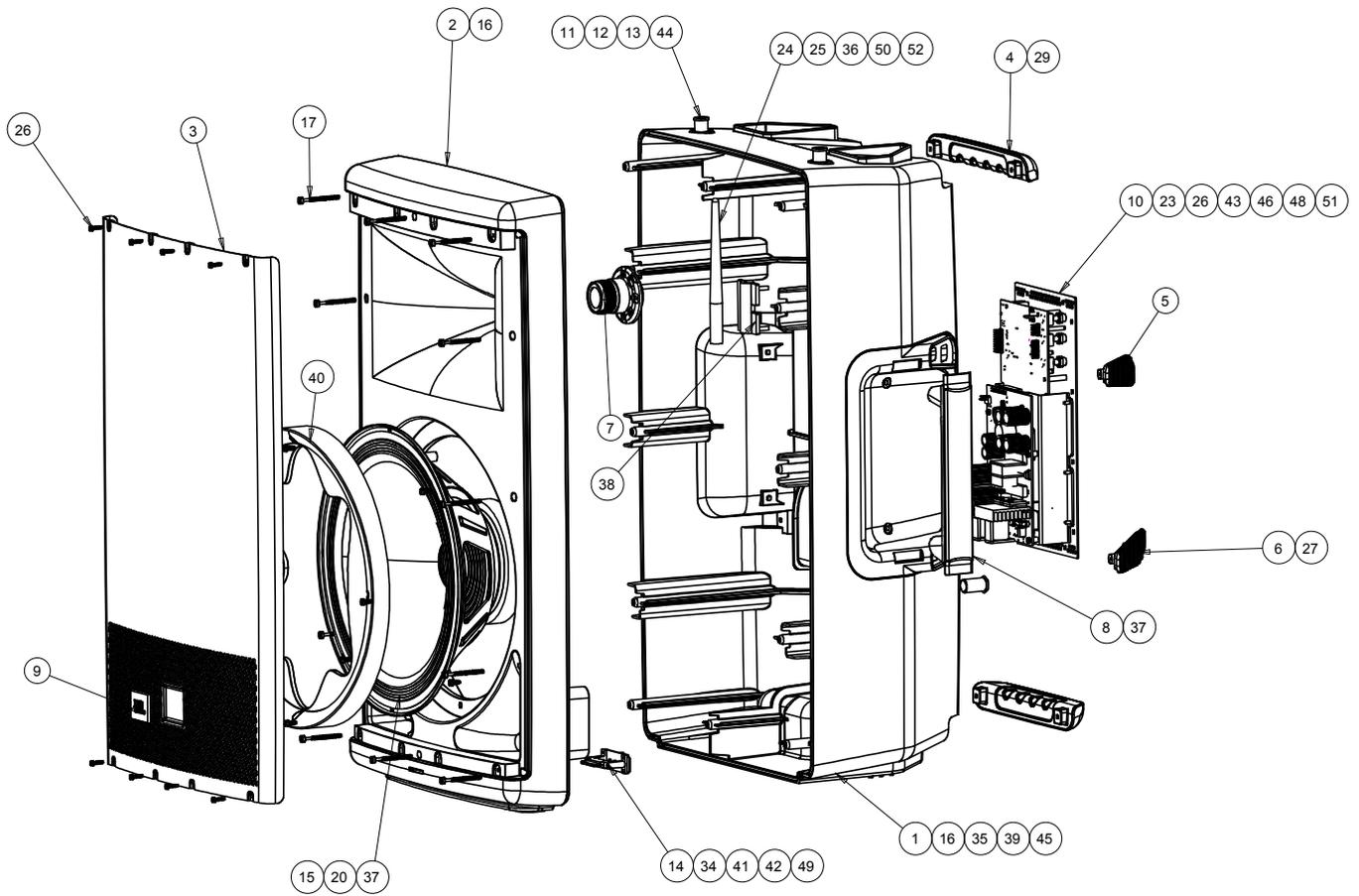


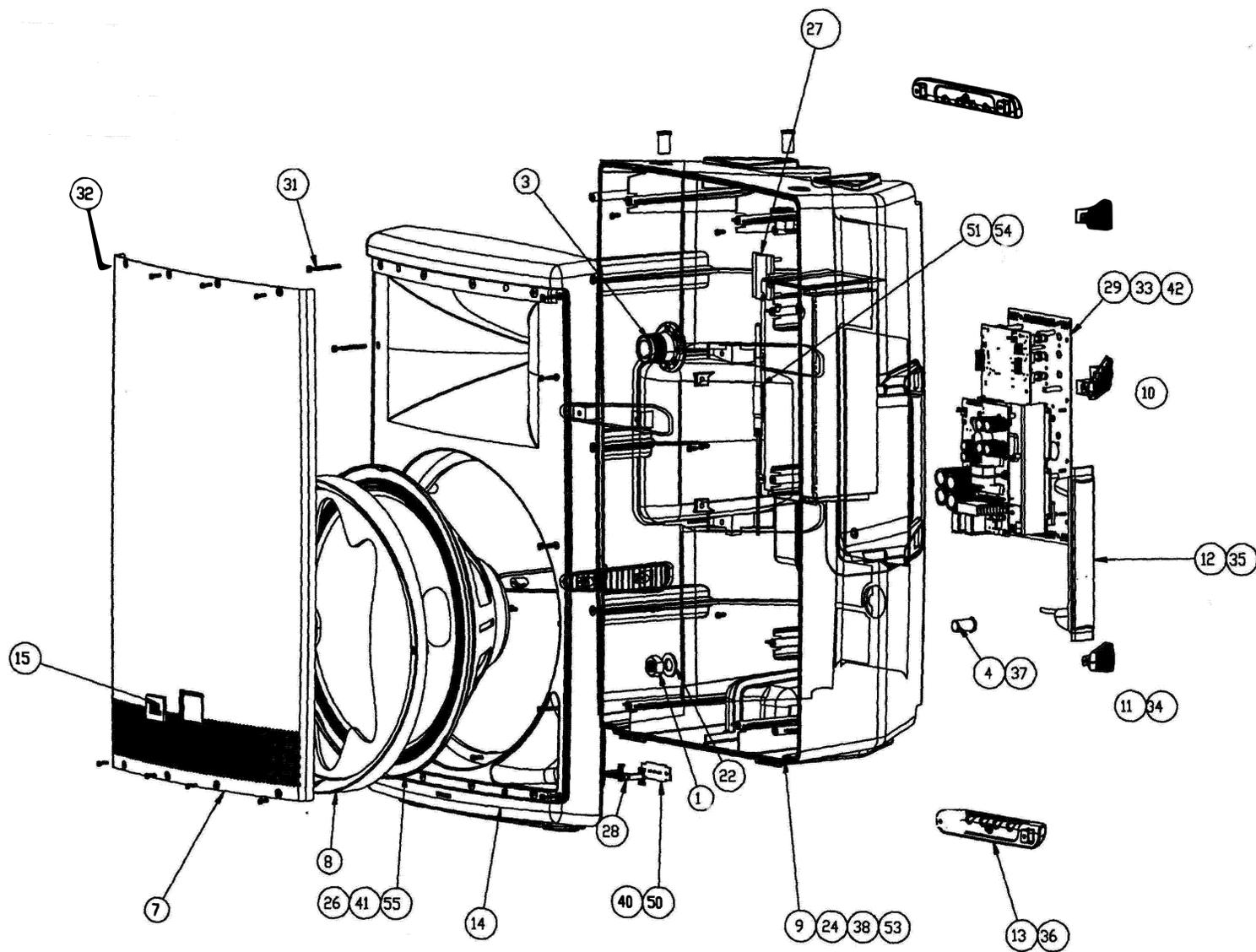
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Date: 10/22/2015	Time: 3:43:36 PM	Sheet 1 of 1
File:		

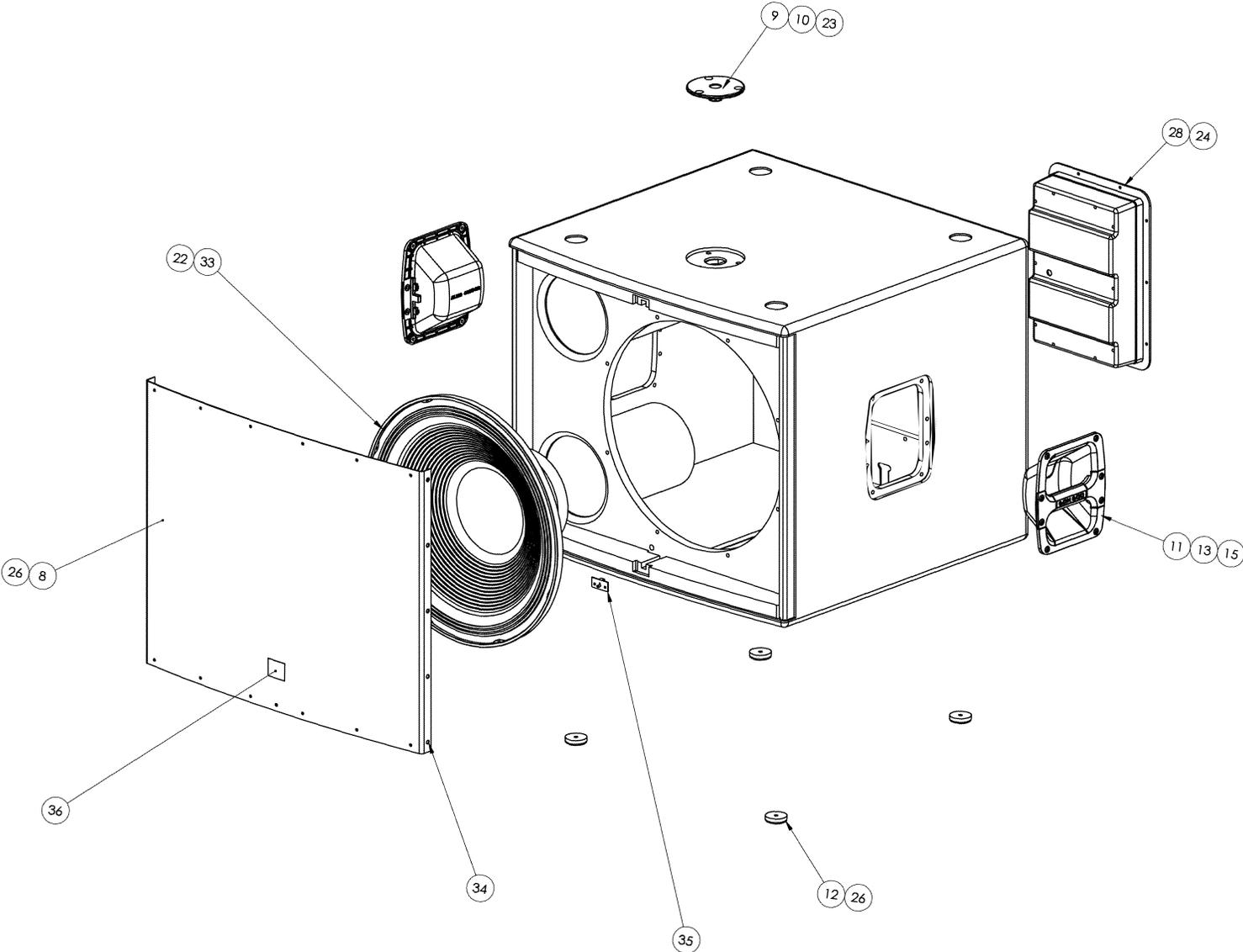


Sheet Title: JBL EON618 AMP 20150723 V1.0.0.SchDoc		Date Modified: 7/10/2015	
Project Name: *		Sheet: of	
Customer: JBL Pro			
Drawn by: YF. Cai			
Last Modified by: YG Xie			
Approved by: Fill out info here			









For reference only, refer to SBOM to view and order spare parts

Bill of Materials		
NO.	Description	Qty
1	REAR ENCLOSURE	1
2	BAFFLE	1
3	GRILLE	1
4	HANDLE, TOP/BOTTOM EON600 SERIES	2
5	SIDE FOOT LEFT	2
6	SIDE FOOT RIGHT	2
7	M/I, 2414H-1	1
8	SIDE HANDLE ASSEMBLY	2
9	LOGO SRX800	1
10	IC,AMPL	1
11	NUT, M14 FINE, CLR ZINC RH	3
12	FLY BOLT, EONG3	3
13	WASHER, M14,REG, CLR ZINC	3
14	FRONT LED LENS	1
15	MFD ITEM, WOOFER	1
16	GASKET, ENCLOSURE EON515	10.6
17	SCR,PT,M4x40mm PAN HD, TORX DRIVE BLK MAGNI577	12
18	PLASTIC BAG	1
19	QUICKSTART GUIDE, EON600	1
20	GASKET, WOOFER, AE	1
21	CBL,PCRD,AC,LINE,10A,230V,EON AU	1
	POWER CORD CHINA,L=2M,3C	1
	CBL,PCRD,AC,JAPAN,1m,0.75mm2,BLK	1
	CORD, AC, LINE, CEE 7/7 (EUROPE)	1
	CORD, AC, LINE, 120V, EON	1
22	Wire Harness w/Ferrite, EON615	1
23	ANTENNA, EON600 SERIES (NEW)	1
24	SCREW, AMPLIFIER & GRILLE, EON600	20
25	SCR,PT,M4x15mm washer head torx, BLK	8
26	SCR,PT,M4x22mm, WASHER HEAD, TORX,BLK MAGNI577	4
27	INNER CTN BEAUTY	1
28	SHIPPING CTN	1
29	TOP /BTM FILLER	2
30	SCR, 4 X 1/2,RND,PH,WOOD,CLR ZINC,LCS	2
31	TINNERMAN CLIP	4
32	CUP PLUG, EON500	1
33	FSTNR,BLT,PT,M5X28MM,PANHD TORXMAGNI577	12
34	ANTENNA HOLDER	1
35	DACRON (DANDONG)	5.6
36	COVER PLATE	1
37	EON600, LED-ANTENNA GASKET	1

Bill of Materials		
NO.	Description	Qty
38	FRONT LED ASSEMBLY, EON600	1
39	LINER, EON600	1
40	PERMANENT THREADLOCK, (RED) Loctite 2760	0.15
41	ADH,JET_MELT/3796-PG	0.03
42	GASKET, CLOCKING	1
43	FERRITE BEAD ANTENNA, EON615	1
44	ADH,TORQUE INDICATOR,BLU	5