



The TC4018A is an active 2500W, DSP processed, low profile single 18-inch powered subwoofer system featuring additional power output ideal for two TC4300 column arrays, or up to eight TC4330, TC4331 or TC4335 mini column elements. The high power, cast frame Faital Pro™ 18-inch driver provides outstanding deep bass performance. Optimized presets for the TC4300 series columns are factory programmed for simple setup

ACTIVE 2500W SYSTEM

The 2500W active X-Drive™ DSP controlled power module provides a 1500W bridged amplifier for the internal woofer and an additional 1000W amplifier output for external main cabinets. The internal X-Drive™ DSP maximizes output performance, using up to 48dB/oct crossover filters, parametric EQ, alignment delay and limiters. Turn on the Enhanced Bass to extend low end frequency response by another 15Hz and boost the 35-50Hz range. DSP control keeps the amplifier parameters within the limits of the speaker.

CONNECT, SELECT AND PLAY

The external amplifier output is ideal for powering two TC4300 columns, or can power any top main cabinets down to 4 ohm. The internal X-Drive™ DSP has presets to maximize output performance of the selected TCS cabinets. Using a cabinet that's not in the presets? Select the "Variable X-Over" preset and set the crossover frequency manually. Don't need to power a top cabinet? Use the "Sub only" preset, set the crossover frequency for the sub and you are ready to go.

CORNERSTONE OF THE TCK COLUMN SYSTEMS

The TCK column systems are powerful compact live sound systems, with the TC4018A as the cornerstone for system amplification and DSP processing. Each TC4018A can drive two TC4300 column arrays to complete the system's mid to high frequency coverage with CDD™ (Constant Directivity Dispersion™) technology to produce clear, powerful sound both near and far. The internal X-Drive™ DSP processor maximizes performance output, so all you need to do is select the TC4300 preset, plug in the speakers and play.

FAST AND FLEXIBLE SYSTEM SETUPS

Stacked or flyable systems lock together quickly and securely, with the TC rigging plate in the top of the TC4018A and in each end of the TC4300 series columns. A captive quick-release pin on the columns allows fast set up and take down with no parts to lose or forget.

In place of one TC4300, use up to four of the TC4330, TC4335 or TC4331 mini column elements with 0, 5, or 10 degree ends to build a curved column array with up to 20 degree angles. Power is distributed evenly to each driver in the combined array and the system automatically corrects without changing DSP settings.

20 captive nut flypoints allow the TC4018A or a fully assembled TCK system to be suspended with standard flyware. Skid blocks on the bottom of the TC4018A fit into the receptacles on top for stacking two subs. A top pole mount allows suspension of standard speakers.

Transport is made easy with the DB4018 dolly board / lid, which latches to the front of the cabinet to protect the front grill and provide casters for rolling. Rear feet interlock when stacking two TC3018 on end for rolling transport and fit into a standard truck pack square.

RECEIVING INSPECTION—read before getting started

INSPECT YOUR UNIT FOR DAMAGE, which may have occurred during shipping. If damage is found, please notify the shipping company and TCS Audio immediately.

SAVE THE CARTON & ALL PACKING MATERIALS. In the event you have to re-ship your unit, always use the original carton and packing material. This will provide the best possible protection during shipment. TCS Audio and the shipping company are not liable for any damage caused by improper packing. SAVE YOUR INVOICE. It will be required for warranty service if needed in the future.

SHIPMENT SHORTAGE. If you find items missing, they may have been shipped separately. Please allow several days for the rest of your order to arrive before inquiring.

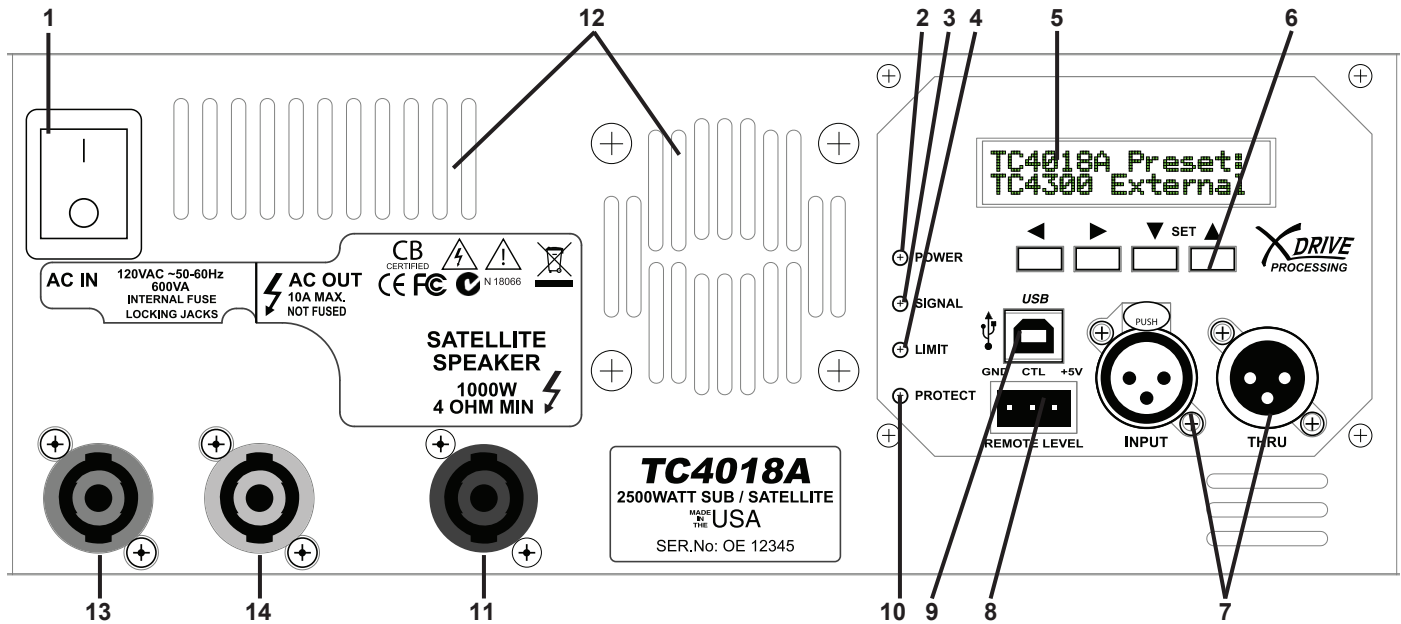
RECORD THE SERIAL NUMBER on the enclosed warranty card for your records. Keep your portion of the card and return the portion with your name and comments to us.

SPECIFICATIONS:

TC4018A

System Type:	Active, 2500W X-Drive™ DSP controlled, 18-inch sub, bass-reflex
Freq. Response:	32 Hz – 1.5kHz (-10dB), 38 Hz – 1kHz (-3dB)
Bass Enhance mode:	15Hz < normal
Coverage Pattern:	Omni - Cardioid in 8x arrays
Crossover Frequency:	Active DSP Preset, or 58-160 Hz @24dB/oct.
Power:	3200W 2 cycle pulse peak 2500W 20ms burst (1500W /1000W external) 1875W RMS (1250W, 625W external)
Input Sensitivity:	1.0, 1.2, 1.4, or 2.0 Vrms settings
Maximum Input signal:	+12dBu
Maximum SPL:	133dB peak
Drivers:	Faital Pro™ 18-inch, 4-inch VC
Enclosure:	13-Ply Russian Baltic Birch
Suspension/Mounting:	20 captive nut flypoints (3/8"-16t) TC rigging plate for TC4300 column array and TC4330, TC4335, TC4331 mini arrays 1x 1-3/8" pole mount cup bottom skid blocks top skid block receptacles for stacking
Transport:	2 Recessed Handles Interlocking rear feet for transport stacking
Finish:	Black DuraTec™
Grill:	Black powder coated steel Acoustically Transparent Foam Backing
Connectors:	Signal In/Thru: XLR female/XLR male
External Speaker:	4 pin twist-lock
Remote Level/Mute:	Terminal block
AC IN/OUT:	Neutrik™ PowerCon™, A-Type/B-Type
Dimensions:	20"h x 22.6"w x 29"d (508 x 574 x 737 mm)
Net Wt:	88 lb (40 kg)
Accessories:	DB4018 Dolly Board / Lid
Origin:	USA

CONTROL PANEL FEATURES



1. POWER SWITCH (reset)

Push the upper portion of the power switch to turn the system on. If the blue POWER indicator is on but there is no sound or the Protect LED is on, reset, turn the power off for 10 seconds and then turn it back on. If the problem persists, check for; a) lack of Input signal, b) external speaker impedance being too low for the amp, c) bad speaker cable, d) damaged speaker, or e) blocked fan intake.

2. POWER LED

The POWER LED indicates the unit is turned on and functioning properly.

3. SIGNAL LED

The SIGNAL LED indicates there is a signal present at the INPUT XLR.

4. LIMIT LED

The LIMIT LED indicates maximum output of the system is being reached. A flashing LIMIT LED is acceptable, the DSP will reduce peaks to prevent amp clipping. If the LIMIT LED is continuously ON, reduce the level going in to the INPUT XLR. As with any system, reduce the volume if distortion is heard.

5. DIGITAL DISPLAY

The bright green LED DIGITAL DISPLAY will display various information about the system and its settings. When you first turn on the unit, the display will indicate which preset is loaded. To change settings use the UP/DOWN (SET) and LEFT/RIGHT buttons.

6. SETTING BUTTONS (SET)

Use the UP and DOWN (SET) buttons to load different presets for external speaker connections. The LEFT and RIGHT buttons will allow editing of more advanced settings, which are explained in the SETTINGS MENU section of this manual. There are only a few to select from.

7. INPUT/THRU XLR CONNECTORS

Connect the INPUT XLR to a signal source such as the output of a mixer. The THRU XLR can be connected to more TC4018A's or other units.

8. REMOTE LEVEL (MUTE) CONNECTOR

This is a terminal block connector with 5 volt control of volume, typically used in permanent installations. Short the CTL and GND pins to MUTE.

9. USB PORT

The USB port is for updating system firmware such as additional speaker presets for TCS Audio speakers connected to the SATELLITE SPEAKER output.

10. PROTECT LED

The PROTECT LED indicates one of the protection circuits has activated and no sound will be heard from the amp. To reset the amp, turn the power off for about 10 seconds, then turn it back ON. If the PROTECT LED stays lit for more than 5 seconds, check your SPEAKER OUTPUT cable connections, speaker impedance or a blocked fan intake.

11. SATELLITE SPEAKER OUTPUT

The SATELLITE SPEAKER output is a twist-lock connector for powering external speakers. This output will drive two TC4300's or combinations with the TC4330, TC4331, TC4335 mini column elements down to 3 ohms. Other speakers can be chained together for a minimum of 4 ohms.

A preset for driving the TC4300 series speakers is pre-programmed. If there is no preset for your speaker, manual settings are available.

If you go below the minimum speaker load, the amp may shut off or the red PROTECT LED may light. To reset the protection circuit, turn off the POWER switch and connect the recommended load.

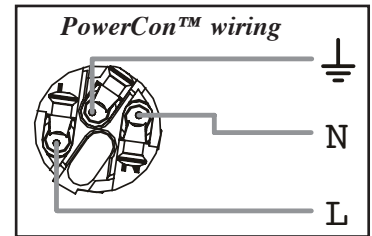
12. FAN INTAKE / EXHAUST VENTS

The power module features a variable speed fan, which runs silent at low speeds. Make sure the fan intake and exhaust vents are free from blockage at all times.

13. AC IN JACK (BLUE POWERCON™ A-TYPE)

The AC IN connector accepts the blue Neutrik™ PowerCon™ "A-type" connector (part# NAC3FCA). One NAC3FCA connector is supplied, attached to a short length of 3-conductor wire. You can use a longer wire if it is properly rated for the application. Attach a proper 3-prong connector for your voltage type to the other end of the wire, with careful attention to follow the correct pinouts and safety standards. No attempt should ever be made to use the unit without the ground connected. Plug into the proper voltage for your unit.

Alternately, you can attach the grey Neutrik™ PowerCon™ "B-type" connector (part# NAC3FCB) for an A-B jumper cable between two TC4018A's. Pay careful attention to follow the correct pinouts and safety standards. With the connector attached, plug into the AC OUT jack of another TC4018A, or into a PowerCon™ "B-type" outlet with the proper voltage.



14. AC OUT JACK (GREY POWERCON™ B-TYPE)

The AC OUT connector accepts the grey Neutrik™ PowerCon™ "B-type" connector (part# NAC3FCB), and is used to power other units.

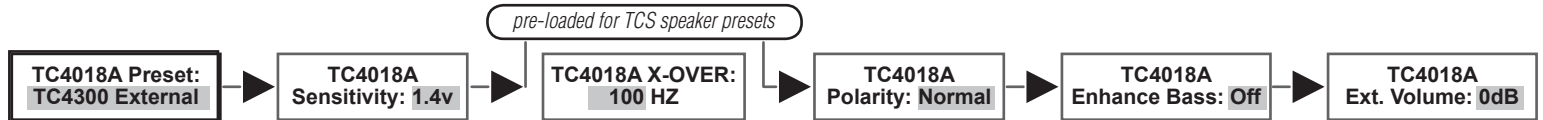
Use the VA rating on other devices to determine how many can be connected to the AC OUT. The maximum limit on the AC OUT connector is 15A. Other limiting factors include the breaker rating for the AC line you are plugging into, wire type and (if used) generator capacity.

FUSE

The FUSE is located internally near the AC input. To check or replace, first **remove the power cord** and then remove the amp module from the speaker enclosure then remove the front panel to access the fuse. The fuse type is a 250V Slow Blow rated at 10A.

SETTINGS MENU

To adjust DSP settings, choose a setting screen with the LEFT and RIGHT buttons ◀▶. Use the UP and DOWN buttons ▲▼ to adjust the setting. Settings are automatically saved to the preset.



TC4018A Preset: TC4300, TC4300 Sub Only (add a 4018A), Variable Crossover, or Sub Only (with low pass crossover).

This selection will load different groups of settings for the TC4018A, which are based on the type of speaker to be connected to the SATELLITE SPEAKER output. Optimized settings for the TC4300 series speakers are pre-programmed and are loaded from memory when the preset is chosen.

Use the “TC4300” preset if you are connecting TC4300 speakers, and/or a combination with TC4330, TC4331, TC4335 speakers.

Use the “TC4300 SUB ONLY” preset if you are adding a TC4018A to an existing TCK system (TC4018A/TC4300 stack).

Use the “Variable X-Over” preset if you are connecting external speakers other than the TC4300 series.

Use the “SUB ONLY” preset if you are not using the SATELLITE SPEAKER output.

When you change a setting under one preset it will be saved to memory for only that preset. Settings for other presets will remain unchanged.

To choose a different preset, first return to the “TC4018A Preset” screen by using the LEFT/RIGHT buttons, then use the UP/DOWN buttons.

SENSITIVITY: 1.0v, 1.2v, 1.4v, 2.0v (Vrms)

Sets the overall level required from your source to the INPUT XLR to reach maximum volume. A lower setting will increase volume, a higher setting will decrease volume. The factory setting is 1.4v.

X-OVER: (CROSSOVER) 58Hz through 160Hz, OFF, or pre-loaded for TC4300 speaker presets.

For the TC4300 speaker presets this adjustment screen is bypassed, the optimal settings for these speakers are pre-loaded from system memory.

When using the “Variable X-Over” or “SUB ONLY” preset, this setting is available to adjust the Crossover frequency. This is the highest frequency delivered by the TC4018A subwoofer. In the “Variable X-Over” preset this is also the lowest frequency delivered to the SATELLITE SPEAKER output.

Smaller speakers usually require a higher setting because they cannot reproduce the lower frequencies, while larger speakers can be used with a lower frequency setting. A good starting point is to set this to slightly above the lowest frequency available from the external speaker (-3dB rating).

This is a 3rd order, 24dB/oct filter. Use the OFF setting if you are using an external crossover device.

POLARITY: NORMAL or REVERSE

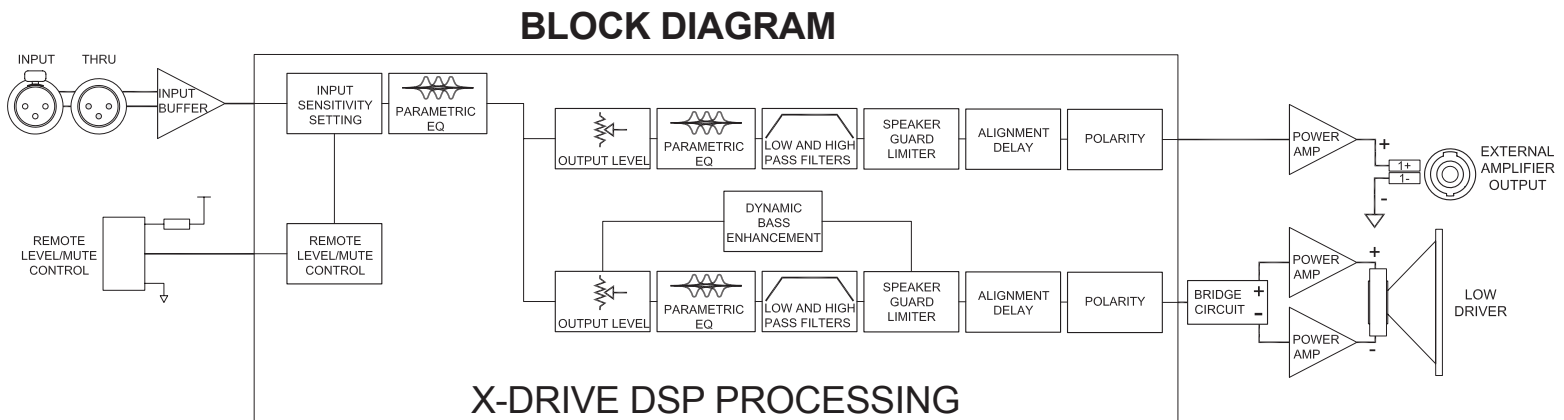
The Polarity setting will set the phase of the TC4018A subwoofer to Normal or Reverse. If subwoofers are placed at multiple locations in a room or if the external speakers are positioned far away from the TC4018A, low frequencies can be affected by phase cancellation. If low frequencies are lacking or sound unusual, try the Reverse setting. The factory setting is Normal.

ENHANCE BASS: OFF, ON

The Enhance Bass feature allows lower frequencies to be reproduced by the TC4018A. This setting lowers the sub frequency extension by 15Hz without overloading the system. This effect will be reduced at higher volume, however, it adds to the feeling at moderate levels.

EXT. VOLUME: +6dB to -6dB in 1db steps, -9dB, -12dB, MUTE

The External Volume setting will adjust the level of the SATELLITE SPEAKER output. Typically this is set for “0dB”. This setting can be used to adjust the level between the TC4018A subwoofer and the external speaker.



TCK

POWERED COLUMN ARRAY SYSTEMS

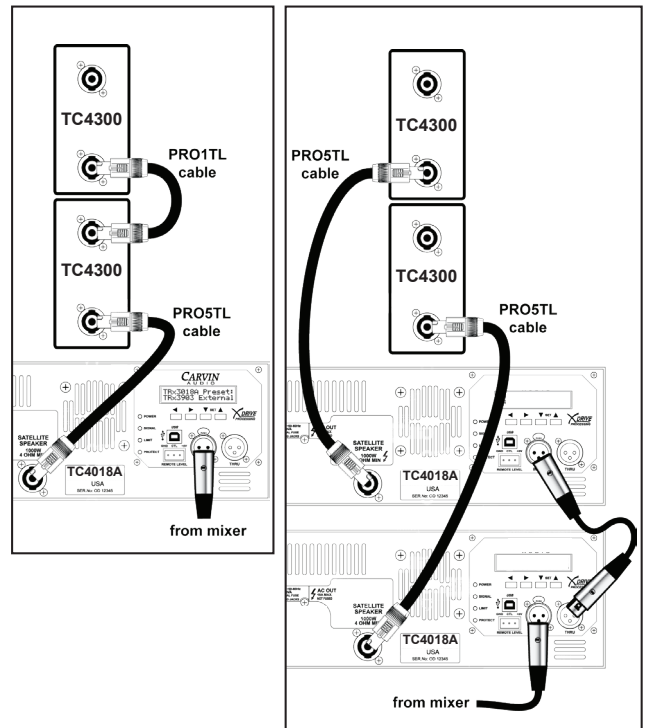
- Easy to connect - systems set up in a few minutes
- High level, dynamic sound for live performances
 - Up to 10,000 watts of DSP system power
 - Amazing clarity and intelligibility
- Wide dispersion eliminates multiple stacks
- Designed to solve difficult room acoustics
 - Installation or portable use
 - Small to large venues
 - Made in the USA



EASY SYSTEM CONNECTIONS:

SINGLE SUB

DUAL SUB



TCK1 2500w


- 2x TC4300 columns
- 1x TC4018A sub
- 1x PRO1TL
- 1x PRO5TL cables
- 2x CB4300 case

TCK2 5000w

- 4x TC4300 columns
- 2x TC4018A subs
- 2x PRO1TL
- 2x PRO5TL cables
- 4x CB4300 cases

TCK3 10,000w


- 4x TC4300 columns
- 4x TC4018A subs
- 4x PRO5TL cables
- 4x CB4300 cases

 This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance. 

IMPORTANT! FOR YOUR PROTECTION, PLEASE READ THE FOLLOWING:

WATER AND MOISTURE: Appliance should not be used near water (near a bathtub, washbowl, sink, laundry tub, in a wet basement, near a swimming pool, etc). Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

POWER SOURCES: The product should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

GROUNDING OR POLARIZATION: Precautions should be taken so that the grounding or polarization is not defeated.

POWER CORD PROTECTION: Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs.

SERVICING: The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

FUSING: If your unit is equipped with a fuse receptacle, replace only with the same type fuse. Refer to replacement text on the unit for correct fuse type.

SAFETY INSTRUCTIONS (EUROPEAN)

The conductors in the AC power cord are colored in accordance with the following code.
GREEN & YELLOW—Earth BLUE—Neutral BROWN—Live
U.K. MAIN PLUG WARNING: A molded main plug that has been cut off from the cord is unsafe. NEVER UNDER ANY CIRCUMSTANCES SHOULD YOU INSERT A DAMAGED OR CUT MAIN PLUG INTO A POWER SOCKET.

LIMITED WARRANTY

Your TCS Audio loudspeaker is guaranteed against failure for 5 YEARS unless otherwise stated. TCS Audio will service and supply all parts at no charge to the customer providing the unit is under warranty. Shipping costs are the responsibility of the customer. TCS AUDIO DOES NOT PAY FOR PARTS OR SERVICING OTHER THAN OUR OWN. A COPY OF THE ORIGINAL INVOICE IS REQUIRED TO VERIFY YOUR WARRANTY. TCS Audio assumes no responsibility for horn drivers or speakers damaged by this unit. This warranty does not cover, and no liability is assumed, for damage due to: natural disasters, accidents, abuse, loss of parts, lack of reasonable care, incorrect use, or failure to follow instructions. This warranty is in lieu of all other warranties, expressed or implied. No representative or person is authorized to represent or assume for TCS Audio or Carvin any liability in connection with the sale or servicing of TCS Audio products.

TCS AUDIO SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

MAINTAINING YOUR EQUIPMENT

Avoid spilling liquids or allowing any other foreign matter inside the unit. The panel of your unit can be wiped with a dry or slightly damp cloth in order to remove dust and bring back the new look. As with all pro gear, avoid prolonged use in caustic environments (salt air). When used in such an environment, be sure the amplifier is adequately protected.

SERVICE:

In the USA, please go to www.tcsaudio.com under "SUPPORT" click on "REPAIR INFORMATION"

Outside the USA:

contact your dealer or go to <http://www.tcsaudio.com> click on "DEALERS" for your nearest service center.

Include a written description of the problem with serial number and date of purchase.



CAUTION
RISK OF ELECTRIC SHOCK

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL! THIS UNIT CONTAINS HIGH VOLTAGE INSIDE!