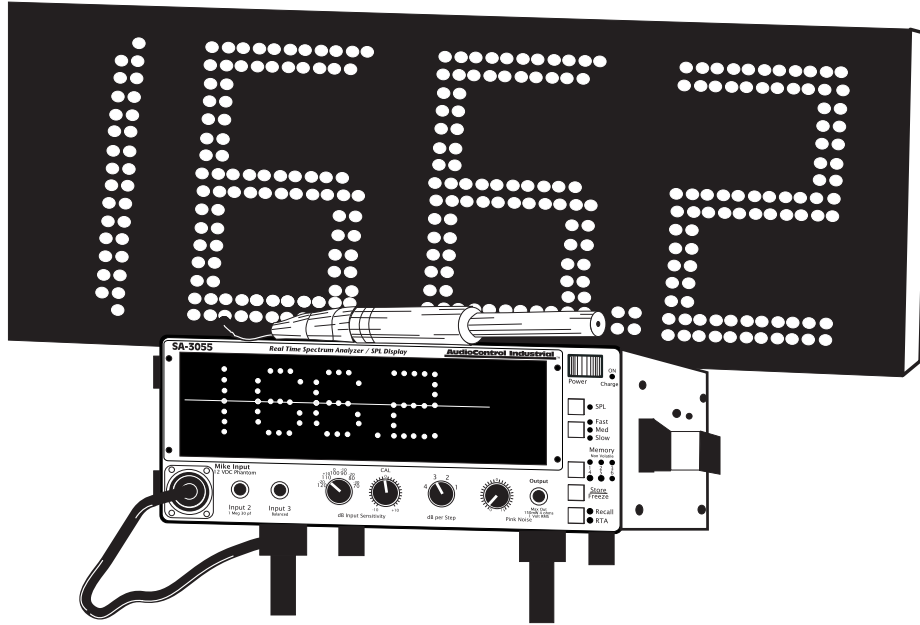


# Blazing SPL Display



Quick and Easy Set-up Manual

# DB-300<sup>tm</sup>

and

# DB-600<sup>tm</sup>

## **AudioControl<sup>®</sup>**

22410 70th Avenue West • Mountlake Terrace, WA 98043

Phone 425-775-8461 • Fax 425-778-3166 • [www.audiocontrol.com](http://www.audiocontrol.com)

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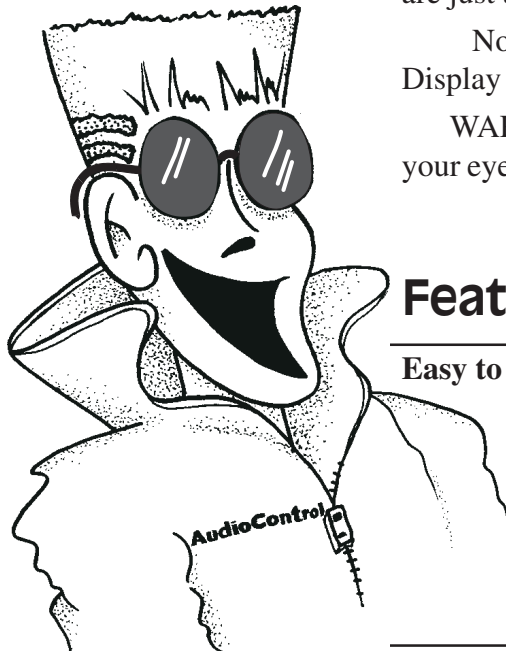
**ALWAYS STORE YOUR AUDIOCONTROL SA-3055 ANALYZER PLUGGED IN TO AC POWER.** By keeping it plugged in you keep the battery charged and lengthen its effective life. This will benefit you even if you “never” use it with battery power.



**Congratulations** on having one of the hottest autosound competition tools available. AudioControl products have been a part of SPL contests since before people knew what SPL contests were! The fact that we have added new products like the DB-300/DB-600 Blazing Display and our HOT new model of The Epicenter (we know we're pushing our product) reveals that we are just as excited about SPL Contests as you are.

Now, let's plug in this cool new DB-300/DB-600 Blazing Display and see what happens.

**WARNING:** You may need to stand back to avoid burning your eyeballs. It's bright. That's why we call it Blazing!



## Features of the DB-300/DB-600

### Easy to use

- Just plug it in and you are ready to drag instantly!
- Universal power supply
- 90 to 240V 50/60Hz AC
- Hook it up to your car battery or other source of 12V DC for full portability

### Easy to read

- Visible in full daylight up to 200 feet.

### Lightweight

- Weighs less than ten pounds

### Easy to mount

- Just screw it on top of any camera-type tripod. Mount it from the top or bottom via the threaded inserts

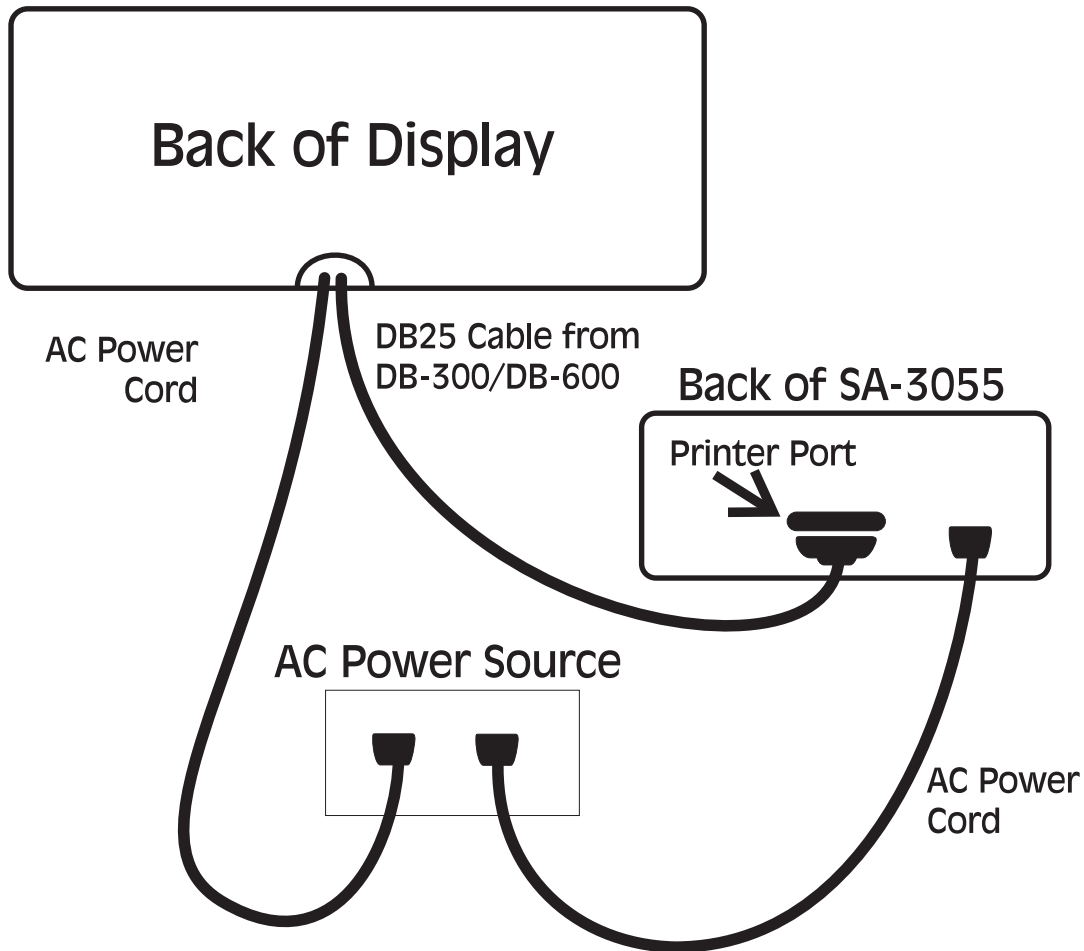
### Connectability

- Up to four (4) DB-300/DB-600 units can be daisy-chained together for simultaneous read-outs. See Advanced Connections for info on this feature.

### Simulstart option

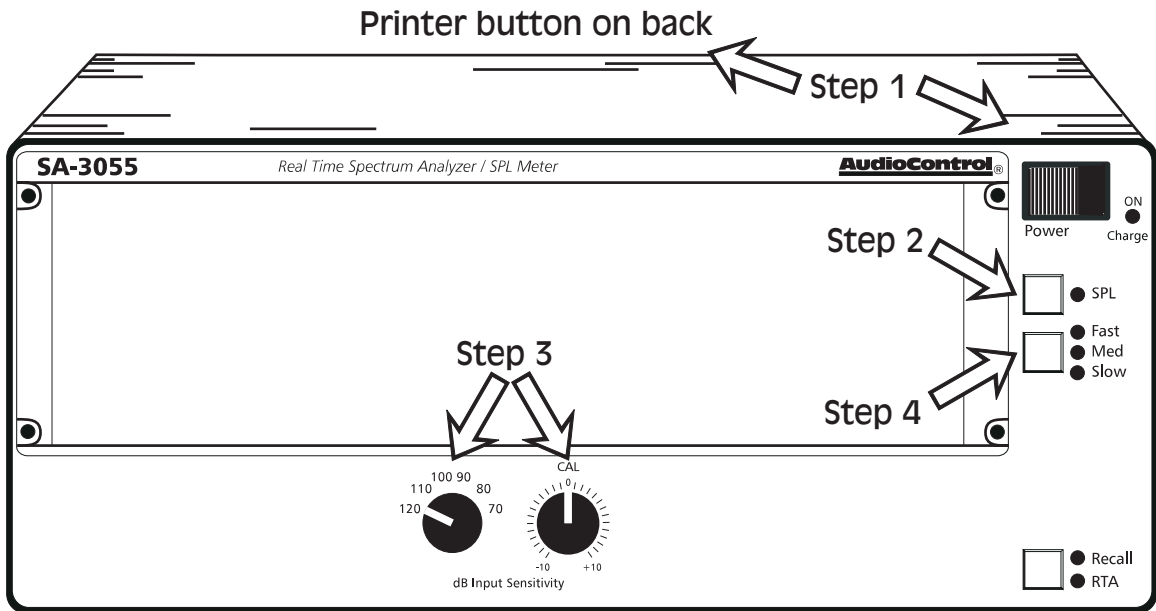
- Two SA-3055s can now be started simultaneously when connected to DB-300/DB-600 displays.
- One small handheld button starts both of your analyzers.
- Do an SPL contest with just two analyzers, two displays and one Simulstart Button - *nothing else.*

# Quick Start Instructions



## Plugging it in...

- 1** Mount the DB-300/DB-600 where it can be seen by your audience. A camera-type tripod works well for this.
- 2** Plug the DB 25 (the one that looks like it goes with a computer) cable from the rear of the DB-300/DB-600 into the printer port on your SA-3055.
- 3** Plug the supplied AC plug into a convenient wall outlet or connect the 12 volt DC power jack to a car's lighter outlet.



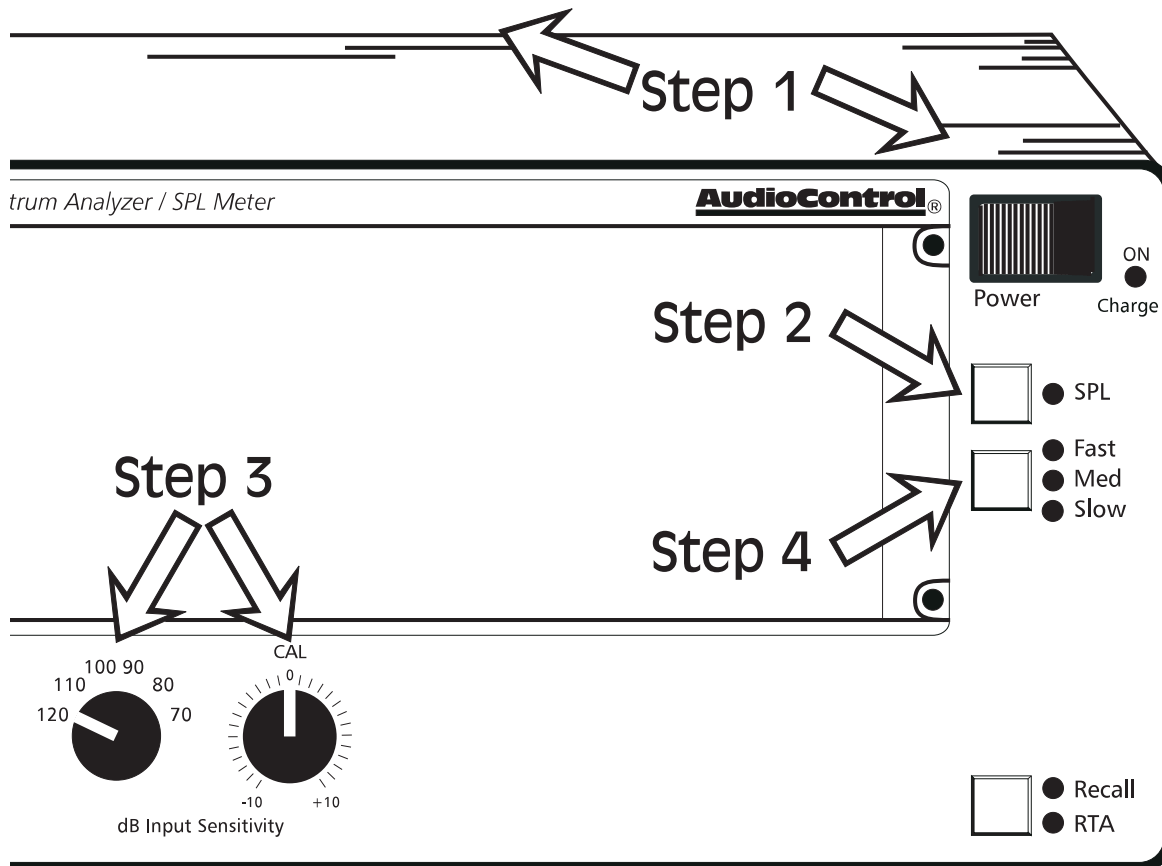
## Four Steps to SPL

- 1** Set your analyzer in the scoring mode by turning the SA-3055 on while holding down the print button on the back of the unit.
- 2** Get into the SPL mode by pushing and holding the SPL button (located under the power switch) to select the SPL mode.
- 3** Set the dB Input Sensitivity knob to the proper range.  
Check the CAL knob to be sure it is centered.
- 4** Start the 30 second countdown by pressing the speed button once. It is located below the SPL button and is labeled Fast, Med, Slow.

**Note:** These steps are described in detail on page 5

# Four Steps to SPL

Printer button on back



Input Setting	SPL-170/5 Microphone	SPL-180 Microphone
70	94-126dB	114-146dB
80	104-136dB	124-156dB
90	114-146dB	134-166dB
100	124-156dB	144-176dB
110	134-166dB	154-180dB
120	144-176dB	164-180dB

SPL Measurement Range

## The “Four Steps” in detail...

**1** Hold in the Print button on the rear of the SA-3055 while turning on the power. This will cycle you through the RTA, IASCA, & USAC modes as long as you continue to hold the button in. Let go of the print button when you see the mode you want in the display window. This will be either the IASCA or USAC mode. These two modes have the 30 second count down necessary for dB Drag Racing.

**2** Press and hold the SPL button. Make sure that you hold the button long enough to display HI in the window if you are measuring vehicles over 136dB. You will know that you have done this correctly if a single red LED is lit on the left hand side of the display. You will also need to use your High SPL microphone, not the short microphone that came with the analyzer.

**Note:** If you do see an OVR (over-range) or UND (under-range) reading on your display, simply change the range knob setting. Turn the knob to the left if you see OVR or to the right if you see UND.

**3** In order to make certain that you are getting a numerical reading on the analyzer rather than the OVR or UND message, you need to set the dB Sensitivity on the front of the SA-3055. It has two controls. One is a setting that allows you to set the SPL range you will be measuring. This control is labeled in ten decibel increments. (Remember that this is only the center of the range. The analyzer will be “listening” and displaying any levels that are 16dB above or below that center point. See chart on page 4.) The other knob is labeled CAL (the fine adjustment) which of course is short for calibrate. This one needs to be in its center detent position. If it is not, you will see incorrect readings on your displays. (Higher or lower than they should be depending on the rotation of the knob.)

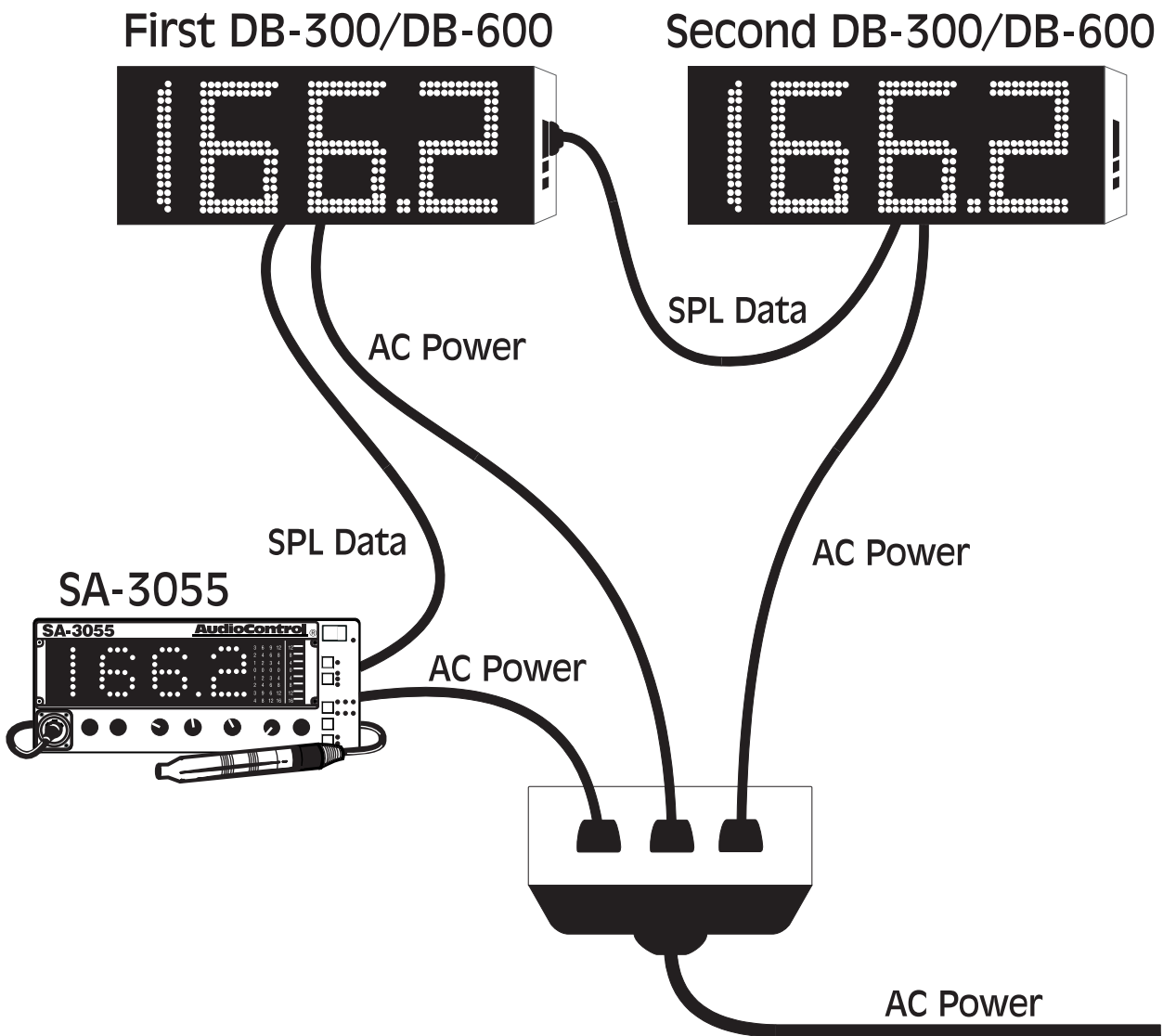
**Note:** If you have our optional Simulstart Button, Step 4 is the same, with one exception. Use the Simulstart Button instead of the speed button on the front of the analyzer to start the countdown.

**4** Press the SPEED button. This will make the three LEDs next to the button blink. This is the time to make sure that your competitors are ready. When ready, tap the speed button again and the 30 second countdown will begin. You will see a row of LEDs on the bottom of the SA-3055’s display window that correspond with the number of seconds remaining in the 30 second countdown. When you reach the last five seconds the DB-300/DB-600 will flash the current SPL level once per second until the 30 second countdown is complete. At this point it will hold the highest SPL reached by that competitor, followed by a flashing of the score. For the grand finale the DB-300/DB-600 will display the score one numeral at a time. The MC for your event should be able to maximize this little feature!

# Advanced Connections

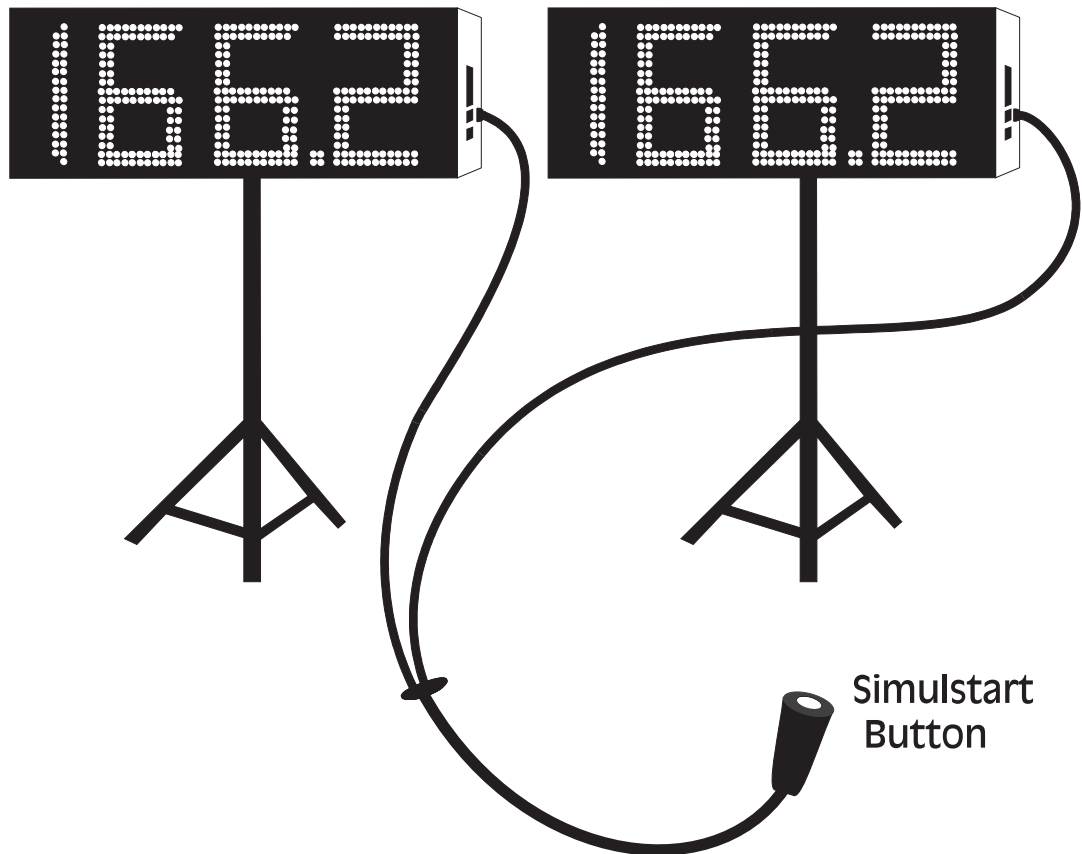
## Daisy Chaining

With the external connections on the DB-300/DB-600 you can connect two DB-300/DB-600 Blazing Displays together to display simultaneous readings from one analyzer. Simply plug the DB25 connector (the computer cable) of your second DB-300/DB-600 to the external plug-in on the end of the first DB-300/DB-600 marked Data Output. Plug the AC power cord of the second DB-300/DB-600 into an AC source and you're finished. You will now be showing the same SPL reading on both displays that shows on your SA-3055. If you would like to connect more, go for it! You can daisy-chain up to four DB-300/DB-600 Blazing Displays to one analyzer. Everyone should be able to see the competitor's scores whether they are eating at the Hot Dog vendor or hanging around near the judging lanes.



## Optional Simulstart Button

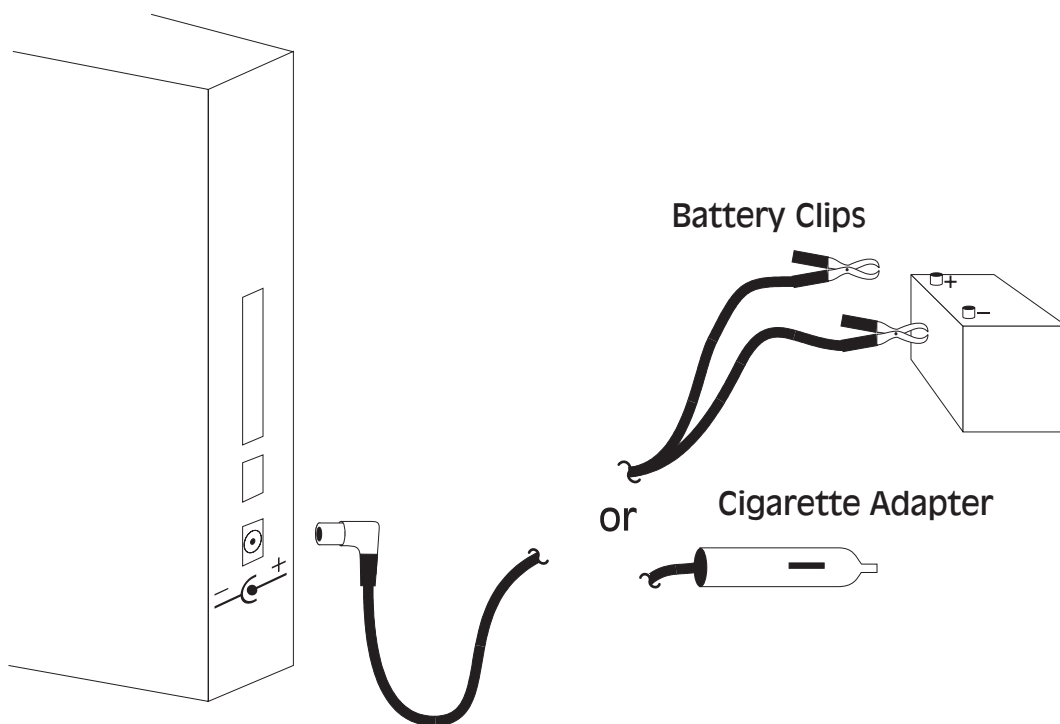
This is every SPL event-holders dream. A button to walk around with that will fit into the palm of a hand and really give the Master of Ceremonies complete control. The plug-in connection is labeled on the end of the DB-300/DB-600 as Simulstart Input. Plug the RJ11 (phone jack) into the Simulstart Input of each DB-300/DB-600 that is directly connected to an SA-3055. The extra DB-300/DB-600s that you have connected do not need to be hooked up to the Simulstart Button.



## Connecting to 12V power

Simply hook up a cigarette lighter adapter plug or any source of 12 volts to a length of power cord and plug it into the Optional External Power input jack on the end of the DB-300/DB-600. This DC power jack is a standard 2.1mm with the center pin being positive DC and the external portion of the plug being negative.

As an option for power, you might consider one of the increasingly popular “jumpstart systems.” This is a battery pack that charges either by plugging into AC power or by hooking up to a car battery. The battery pack will give you a portable 12V source to be completely mobile. Besides, it’ll start a car in a pinch!



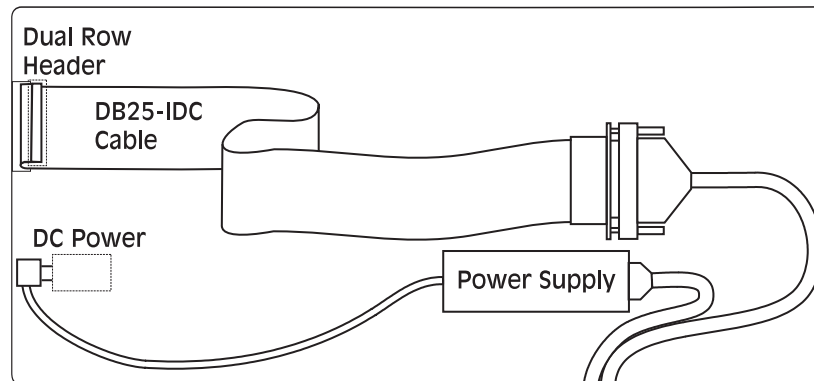
## Finding a stand

A DB-300/DB-600 stand should be one that will provide adequate support under all conditions. Things to look for are: a wide leg span, a sturdy connector or mount on the top, and something telescoping so that you can get the DB-300/DB-600 up high enough to be seen. Any camera stand (still or video) will work since it has a  $\frac{1}{4}$  x 20 thread on the attachment bolt. This is a standard size, and should be easy to find.

## Replacing or removing the cables

You may need to replace the cables that are exiting the DB-300/DB-600 Blazing SPL Display at some point. Some of you may even want to remove the cables altogether. To gain access, simply unscrew the screws on the end panel of the DB-300/DB-600 that has the connectors in it. Carefully slide the back panel out. Unplug the cables exiting this back cavity and viola, you're cable-less. If you are replacing them you should find that replacement cables are easily attainable at your local Radio Shack (IEC power supply cord is PN# 2781257 and the DB25 Male to DB25 Male cable is PN# 10524114.)

DB-300/DB-600  
Back Panel Removed



# Troubleshooting Common Problems

## No Display

### Does the DB-300/DB-600 have power?

The decimal point on the DB-300/DB-600 display is a power indicator. Whether you are connected to AC or DC power, the decimal point should be lit. Check the connections to your power source.

### Is the SA-3050/5 in the IASCA or USAC mode?

The DB-300/DB-600 display is only active when the analyzer is in a competition scoring mode. Turn the analyzer off. Now hold in the PRINT button on the rear panel while turning the analyzer ON. Release the PRINT button when the proper mode is displayed.

### Is the SA-3050/5 in the digital SPL display mode?

The DB-300/DB-600 is only active when the analyzer is in the digital SPL display mode. Press and hold the SPL button on the analyzer to enter the digital mode.

### Is the data cable connected?

Need we say more here? The DB-300/DB-600 is not a wireless device.

### Does your SA-3050/5 have DB-300/DB-600 software installed?

The DB-300/DB-600 is a two-part system. The analyzer must have the driver software installed to operate the DB-300/DB-600 display.

## The Display Shows Three Dashes

Technically, this isn't a problem. The DB-300/DB-600 indicates all dashes under the following conditions:

- The analyzer is under-ranged (the analyzer displays UND)
- The analyzer is over-ranged (the analyzer displays OVR)
- The analyzer is in 30 second stand-by mode (the 3 speed LEDs are flashing).

## The Display Shows Erratic Characters

Do you have multiple DB-300/DB-600s connected to the same analyzer?

Try disconnecting the displays one at a time. You may have a bad cable.

Is the total length of data cable (counting all displays) more than 150 feet?

Excessive cable length or cheap, high-capacitance cable will distort the data going to the DB-300/DB-600 display. Shorten the cable length or use better cable.

*And now a word from the legal department...*

## The WARRANTY

People are scared of warranties. Lots of fine print. Months of waiting around. Well, fear no more, this warranty is designed to make you rave about us to your friends. It's a warranty that looks out for you and helps you resist the temptation to have your friend, "...who's good with electronics", try to repair your AudioControl product. So go ahead, read this warranty, then take a few days to enjoy your new DB-300/DB-600 Blazing SPL Display before sending in the warranty card and comments.

"Conditional" doesn't mean anything ominous. The Federal Trade Commission tells all manufacturers to use the term to indicate that certain conditions have to be met before they'll honor the warranty. If you meet all of these conditions, we will warrant all materials and workmanship on the DB-300/DB-600 Blazing SPL Display for one year from the date you bought it, and we will fix or replace it, at our option, during that time.

Here are the conditional conditions:

1. You have to fill out the warranty card and send it to us within 15 days after purchasing the DB-300/DB-600.
2. You must keep your sales receipt for proof of purchase showing when and from whom the unit was bought. We're not the only ones who require this, so it's a good habit to get into with any major purchase.
3. Your DB-300/DB-600 must have originally been purchased from an authorized AudioControl dealer. You do not have to be the original owner, but you do need a copy of the sales slip.
4. You cannot let anybody who isn't: (A) the AudioControl factory; or (B) somebody authorized in writing by AudioControl to service your DB-300/DB-600. If anyone other than (A) or (B) messes with your DB-300/DB-600 Blazing SPL Display, that voids your warranty.
5. The warranty is also void if the serial number is altered or removed, or if the DB-300/DB-600 Blazing SPL Display has been used improperly. Now that sounds like a big loophole, but here is all we mean by it.

Unwarranted abuse is: (A) physical damage (don't use the DB-300/DB-600 for a car jack); (B) improper connections (120 volts into the DC power jack can fry the poor thing); (C) sadistic things. This is the best product we know how to build, but if you drive around with it on the front bumper of your car, something can go wrong.

Assuming you conform to 1 through 5, and it really isn't all that hard to do, we get the option of fixing your old unit or replacing it with a new one.

### Legalese Section

This is the only warranty given by AudioControl. This warranty gives you specific legal rights that vary from state to state. Promises of how well your DB-300/DB-600 will perform are not implied by this warranty. Other than what we have covered in this warranty, we have no obligation, express or implied. Also, we will not be obligated for direct or indirect consequential damage caused by hooking up the AudioControl DB-300/DB-600.

Failure to send in a properly completed warranty card negates any service claims.

**AudioControl**<sup>®</sup>

**dB-300/DB-600**  
Quick and Easy Set-up Manual

No, not this way. . .

This is the back. Please turn over to use this manual.



**DB-300/DB-600**  
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