

# Church Production

NOV/DEC 2007

*Magazine*

## EBENEZER BAPTIST CHURCH, ATLANTA, GEORGIA

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## Apollo Design Technology

### Right Arm

As a designer I always cringe when a church building is built that doesn't have a lighting catwalk. I do understand that not all buildings are suitable for catwalks, and that catwalks are expensive, but I also understand the time, effort, and expense that it will take to maintain and focus the lighting system without a catwalk.

Granted, not having catwalks isn't that bad if you are in a venue where you set the lighting once and you leave it alone until it's time to replace lamps, but if your organization makes lighting changes every week, not having that catwalk becomes more of a hassle.

I have been in churches where the lighting team has told me they would give anything not to have to spend the hours moving chairs so they can get a lift into place to access the platform lights. This is especially true when hours of work are required to refocus four or five fixtures, something that would take 20 minutes with a catwalk.

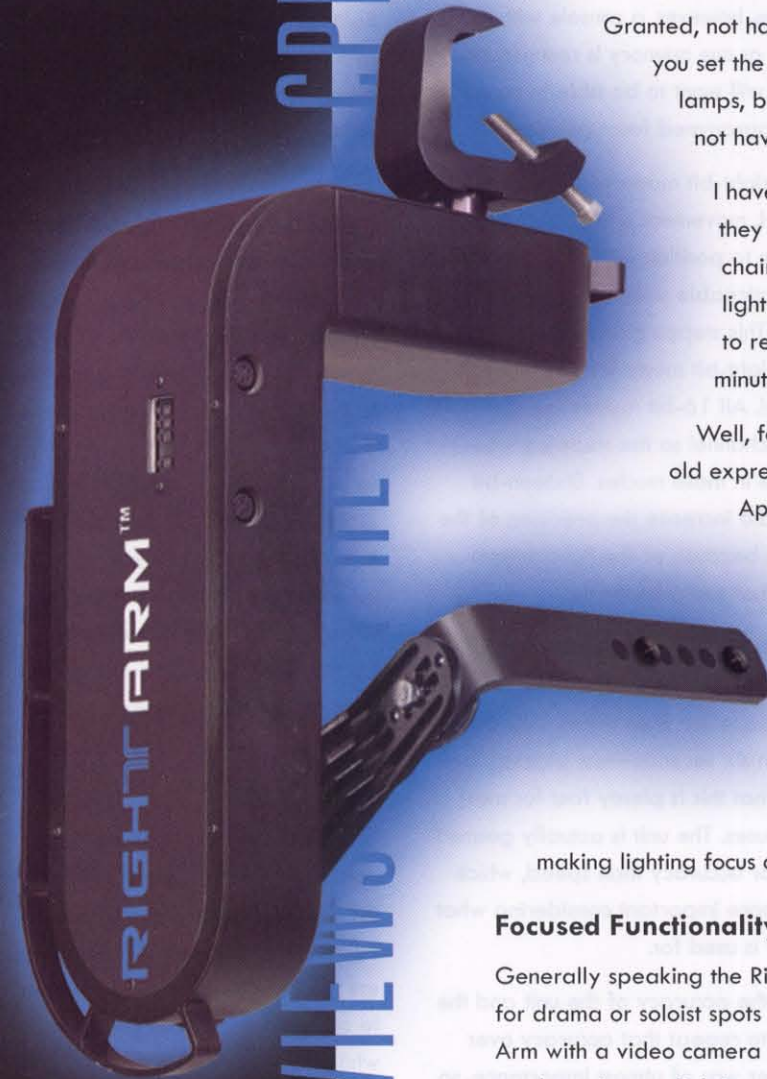
Well, for those of you that are in this situation, and would, as the old expression goes, give an arm or a leg to make your job easier, Apollo Design Technology is willing to give you their Right Arm so you don't have to give yours.

The Right Arm is a device that adds remote controlled pan and tilt positioning to most standard theatrical or studio lighting fixtures. Controlled from any DMX-capable lighting control console, the Right Arm allows you to remotely place one fixture in an unlimited number of position focuses without ever climbing a ladder or going up in a lift, making lighting focus changes quick, easy, and much safer.

#### Focused Functionality

Generally speaking the Right Arm is ideally suited for those fixtures that you refocus for drama or soloist spots on a regular basis, however, you could also use the Right Arm with a video camera or a small video projector, or even put one on every light you have in your lighting rig and make everything remotely focusable.

In addition to its remote focus capabilities, the Right Arm also features a 24-volt power supply and two four-pin data/power outlets that can power optional accessories such as color changers and gobo rotators. This means you could also add color changing and gobo rotation to the lights' capabilities. These additional features add a lot of functionality to the Right Arm system, especially for fixtures used for drama.



By Greg Persinger

DVA T4 - Active 3-Way Line  
Array Module

DVA S10 - Active Subwoofer



DVA S20 - Active Subwoofer

**DVA-T4**

Active 3-way line array enclosure loaded with high-quality RCF neodymium transducers and an on-board 3-channel, 420 W/RMS digital power amp featuring a DSP and PFC power supply

- ▶ 100"x15"
- ▶ Max. SPL: 128dB
- ▶ 80 – 19,000 Hz
- ▶ 23" X 9,5" X 13"
- ▶ Weight: 32 lb

# DVA.

## The perfect Line Array for Houses of Worship.

DVA is the first active line array to feature an on-board 3-way digital amplifier, DSP-driven audio processing and stage-ready presets. In combination with RCF Precision® neodymium transducers and an ultra-light polypropylene housing featuring built-in flyware, these premium appointments raise the bar for line array technology. What's more, we shoehorned all this performance power into a small 23" X 9,5" package, freeing you to focus on the big picture.



For control, the Right Arm uses two, three, or five channels of DMX depending on the mode setting of the device. Each mode optimizes the Right Arm to your setup and console type, as well as setting the limits for the range of motion that the Right Arm can move. These mode settings allow the Right Arm to work well with a wide range of lighting consoles, however, a console with sub-master or cue memory is recommended, as you will want to be able to recall pre-programmed focus positions.

In the eight-bit mode with no speed channel, movement was smooth from position to position with only mild stepping noticeable with extremely long fades. This stepping went away when using eight-bit mode with the speed channel. All 16-bit modes use the speed channel so the stepping wasn't an issue in those modes. Sixteen-bit mode did increase the precision of the focuses because of the finer adjustments that could be made.

When trying to make fast moves, I found that the Right Arm isn't extremely fast. Apollo lists it as doing 180 degrees in six seconds—not blazing, but I think that this is plenty fast for most church uses. The unit is actually geared more for accuracy than speed, which is far more important considering what the unit is used for.

To me, the accuracy of the unit and the ability to repeat that accuracy over and over was of utmost importance, so this factor received the most scrutiny during my testing. What I found was that the accuracy and repeatability of the Right Arm was spot on. I ran the unit from focus position to focus position with it being accurate each time. Also

turning the unit off and then back on still gave accurate focuses, which is important when you power down the units from week to week.

### Practical Application

Preparing the Right Arm for initial use is very simple. After installing the Right Arm C-type clamp, an owner-provided lighting fixture is attached. The entire process takes only minutes to complete using the hardware Apollo has provided and an adjustable wrench from your toolbox.

Hanging the Right Arm is no more complicated than hanging any other lighting fixture; you simply hang the unit from its C-type clamp and tighten the clamp's bolt. About the only thing to keep in mind as you hang the unit is that it's going to move, so you will want to be sure there isn't anything that the Right Arm is going to get caught on as it moves. Additionally you will want to measure the amount of space you have to make sure there is enough clearance for the Right Arm. If you have tight lighting covers or hanging positions close to walls, there might not be enough clearance for the Right Arm to operate.

The Right Arm has two electrical cables on the unit, one cable to power the Right Arm and one to power the lighting fixture. The cable that powers the Right Arm should be connected to a constant 115-volt power source, while the lighting fixture plugs into a dimmer with the provided cable that is pre-wired into the unit. Since there are several different plug types used in theatrical lighting systems, the Right Arm does not come with connectors. The user must provide and install plugs and



## QUICK-LINKS


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connectors that are compatible with the equipment in their installation.

In addition to the two power connections there are two DMX data connections. One connection is a data input into the Right Arm while the other is a data output used to connect to the next DMX device.

A few other things to keep in mind is that the Right Arm has no way to adjust the focus or beam spread of any lighting fixture, and that it can not adjust the shutters of an ellipsoidal fixture. However, I don't view these as negatives, just limitations of the tool. If you need these functions you don't need a Right Arm, you need a moving light. Also the unit does produce the typical stepper motor noise associated with moving lights, however, using the speed channel and slowing the unit down easily brought the noise to within acceptable levels for worship use.

Overall I think the Apollo Right Arm (MSRP \$1,195) is a great tool that could be used effectively in many churches. It is easy to install, easy to use, offers a great amount of flexibility, and the accuracy of the focuses is superb. This is definitely a product worth considering if you need some remote focus capabilities but don't need a full-blown automated moving light. Visit Apollo's website ([www.internetapollo.com](http://www.internetapollo.com)) to see a video of the Right Arm in action.

**Greg Persinger is the owner of Vivid Illumination. He can be reached at [greg@vividillumination.com](mailto:greg@vividillumination.com).** 



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