ilderNewsletter Views and News from the World of Gilderfluke & Co.

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#### All New SER-DMX

The latest piece of equipment to join our miniBrick line is the totally re de sig ne d <u>SER-DMX</u>. The SER-DMX is used for controlling remote control-style ServoMotors from its micro Sd card, or from any Gilderfluke Animation Control System or other DMX-512 source. ServoMotors are an inexpensive way to add analog movements to animated figures (see the ServoMotor sidebar on page 4).

#### Features of the SER-DMX include:

- The SER-DMX controls up to sixteen remote control-style RC ServoMotors. These use Pulse Code Modulated (PCM) commands.
- Accepts eight or twelve bit resolution commands from your Pc•MACs Animation Programming System.
- Built-in Ease-In when shows or DMX-512 starts or stops. These keep the ServoMotors from jumping.
- Networkable! The SER-DMX can act as a 'master', sending up to 512 channels of DMX-512 data to other GilderGear and DMX-512-compatible equipment that act as a 'slave', or the SER-DMX can receive DMX-512 from an external source, and itself be a 'slave'. Error checking prevents any updates from bad DMX-512 data. As a 'Master', the SER-DMX has the DMX-512 output capacity to run most shows.

#### SER-DMX: Continued on p.4

# Modem-WiFly Serial Adapter

Attaching GilderGear to the internet just became even easier!

The Modem-WiFly plugs into any Rs-232 serial port and connects wirelessly to the local WiFi network.

If it has been given a fixed IP address, you

can access it not just locally, but from anywhere on the internet. If there is no local WiFi network available for the Modem-WiFly, then the 'Ad Hoc' mode allows you

to connect directly from your computer's WiFi.

#### Features of the Modem-WiFly:

- Networking Standards: IEEE 802.11 b/g
- Frequency Band: 2.412 2.484 GHz
- Modulation: 802.11 b: DSSS (CCK-11, CCK-5.5, DQPSK-2, DBPSK-1): 802.11g: OFDM
- Secure Wi-Fi authentication schemes: WEP, WPA and WPA2
- Protocols: DHCP, DNS, ARP, ICMP, FTP client, HTTP client, TCP, UDP - G

# We're Turning Thirty!

Our first Show Controllers were built, bought and installed in the Spring of 1983.

We are planning an open house and celebration to mark the anniversary. Watch for an announcement and an invitation - G

# New!

# Brown Bag Training

We have provided comprehensive GilderTraining at conventions, at

clients locations, and at installation sites.

At the suggestion of our CFO, Dr. Carolyn Rowley, we are now providing training over lunch at our California office.

Instead of comprehensive training, these twice-amonth sessions cover a single product line. As the name implies, they are scheduled at noon, and run for just an hour or so.

And the cost for these sessions? They are free. Just bring your own lunch!

We send out emails to let people know about the upcoming sessions.

Make sure you contact us if you would like to r e c e i v e these notices. - G

New GilderYou Tube Videos

We put our first batch of training videos onto YouTube last year and the response has been far greater than we could have ever expected! The first videos cover most aspects of the Br-miniBrick4, Br-miniBrick8, Amp-50, Sd-10, Sd-25, and Motion Base Programming. We will be adding more videos as they are completed.

You can access these videos by going to YouTube and searching for 'Gilderfluke', but it is usually easier just to tap the links on our <u>Gilderfluke.com</u> web page's <u>GilderYouTube</u> links.

These videos are broken up into many smaller parts, each having to do with a single aspect of the device. The narration gives you the overview, and you can pause to read more detailed information or to go back over something that wasn't clear to you on the first viewing.

These videos are not meant to replace the manuals, but are just as a visual version of the 'quick starts' that are in most of the Gilderfluke & Co. product manuals. -  ${\tt G}$ 

derfluke Product Playlists	
3r-miniBrick4	
3r-miniBrick8	
ISB Products	o 🛝
vb-DMX/32	
id Audio Products	
Notion Base	2 1000

Notes	tyer Replace- ment	to a 200-250 /att Amp	to a 200-250 latt Amp	to a 400-500 /att Amp	es 8 Show rol Outputs	es 8 Show rol Outputs	rr smallest ontroller	-512 outs eat Memory	tand-alone or irt Brick Brain	512 to Analog Card	512 to Analog Card	512 to Digital Card	8 asynchro- us shows	-512 outs eat Memory	PC into Show Irol System	DVD players iosks, etc.	t DVD players er serial gear	-512 to pwm voMotors	to 1080p, IPEG-2, 4/MPEG-4	<-512 to DC Dimmer	
ar Kit	s CD pla	Equiv. M	is Equiv. M	is Equiv. M	s * Us Cont	s * Us Cont	л О В	dn XWQ *	Runs s in Sma	3-XMQ	3-XMQ	-XMD	Plays	dn XWQ *	Turns I Cont	Runs in k	Runs 8 or othe	DMX. Ser	s N H.26	XWQ	
Starte	Ye		ž	Å	Ϋ́ε	Ye							0						, A		
Flash Card	removable Sd or SdHC		removable Sd or SdHC	removable Sd Card	removable Sd Card	removable Sd Card					removable micro Sd		removable Sd or SdHC					removable micro Sd	removable Sd, SdHC o SdXc cards		
Memory	Sd Cards up to 32 GBytes		Sd Cards up to 32 GBytes	Sd Cards up to 32 GBytes	Show: 4 MBytes	Show: 4 MBytes	8 KBytes	64 KBytes	512 KBytes	Sd Cards up to 32 GBytes	micro Sd up to 32 GBytes		Sd Cards up to 32 GBytes	4 MBytes				micro Sd up to 32 GBytes	Sd Cards up to 32 GBytes		
Serial Port(s)	Rs-232 (optional)		Rs-232/422 (optional)	Rs-232	1) Rs-232 1) Rs-422	1) Rs-232 1) Rs-422	Optional	Rs-232	Rs-422	Rs-422	Rs-232		2) Rs-422	Rs-232		1) Rs-232 or Rs-422	8) Rs-232 1) 232/422	Rs-232	Rs-232		
Clock/ Calendar Schedules					Yes (GPS Optional)	Yes (GPS Optional)							Yes (GPS Optional)						Option on some models		
Trigger In- puts	Two Opto + Serial		Two Opto + Serial	Eight Opto + Serial	Four+Eight* + Serial	Four+Eight* + Serial	One Opto	Two Opto + Serial	Four Opto + Serial	Four Opto + Serial	Two Opto + Serial		Ten Opto + Serial	Two Opto + Serial	Four Opto	Ten Opto	Ten Opto + Serial	Two Opto + Serial	Eight TTL (incl. adapter)		
Show Control Outputs			1 Status Output		Up to 8 Digital	Up to 40 Digital	Four Digital	8 Digital 2 Servo	32 Digital	16 Analog	Four Analog	32 Digital		up to 32 3.5 amp Relays				16 PWM Outputs			
DMX-512 Output					1 Universe (512 Chan.)	1 Universe (512 Chan.)		64 DMX-512 Channels*	Feedthru	1 Universe (512 Chan.)	1 Universe (512 Chan.)	Feedthru	4 Universes (2048 Chan.)	64 DMX-512 Channels*	1 Universe (256 Chan.)			1 Universe (512 Chan.)			
DMX-512 Input					1 Universe (512 Chan.)	1 Universe (512 Chan.)		1 Universe (512 Chan.)	½ Universe (256 Chan.)	1 Universe (512 Chan.)	1 Universe (512 Chan.)	1 Universe (512 Chan.)	1 Universe (512 Chan.)	1 Universe (512 Chan.)	1 Universe (256 Chan.)			1 Universe (512 Chan.)		1 Universe (8 Chan.)	
Other Features	Line Level Out	50 Watt Digital Class-D Amp	50 Watt Amp Mixer Input	100 Watt Digital Amp	100 Watt Amp 8 ServoMotors*	100 Watt Amp 8 ServoMotors*		Two PCM Servo- Motor Outputs			Four PCM Servo- Motor Outputs		Smpte Reader, DVD Control	3.5 Amp AC or DC Relays.	Smpte, DMX & Console in/out	Serial Device Controller	Serial Device Controller/Mux.	16 PCM Servo- Motor Outputs	1080p, 1080i, 720p, 576p, 480 Video Player	12-24 vdc DMX- 512 Dimmer	
Audio Player	Yes (stereo)		Yes (stereo)	Yes (stereo)	Yes (stereo)	Yes (stereo)													Yes (stereo)		
Show Control					Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			Yes			
GilderGear Name	Sd-10	Amp-50	Sd-25	Sd-50/0	Sd-50/8	Sd-50/40	r-miniBrick4	r-miniBrick8	MultiBrick32	Br-ANA	DAC-Quad	Brick (Br-ZBR)	Br-Brain4	b-DMX/8, /16, /24 or /32	MACs-USB	Br-SDC	Br-SDC8	SER-DMX	BrightSign HD Video	LG-DMX/DC	



## New BrightSign High-Definition Video Players

BrightSign has released an all-new set of high definition video players. They have simplified the HD line, reducing what had been four different models down to three, made them smaller, faster and even less expensive.

For those who need even more processing power in their video playback, starting in December, BrightSign will have an all-new line of three 'XD' players. 576p, 480p (HDMI) 1360x768, 1024x768 (HDMI & VGA); 800x600, 540x480 (VGA Only)

- Provides multi-zone and full screen layouts supporting video, images and text tickers
- Real-time clock for date and time zones, scheduling and dayparting
- Video formats supported: MPEG-1, MPEG-2, H.264, WMV. Image formats supported: BMP, JPEG, PNG
- Audio formats supported: MP2, MP3, AAC, and WAV. HDMI and Stereo 1/8" jack are used for audio output



from a simple switch closure, or from one of our show controllers via the v-HD-to-1/4J6 or v-HDto-DMX. Using the v-HD-to-DMX, the v-Hd120 can be triggered from any source of standard DMX-512. This works great for theaters, where the existing lighting board can be used or controlling the audio/visual presentation too.

The second of these new HD players is the v-Hd220. The v-Hd220 is used wherever you need a player that will fire up when it is plugged in and start playing whatever you have loaded onto it. It doesn't have the trigger inputs of the v-Hd120, but does have a 10/100 ethernet port that can be used to synchronize it with other players for 3-D or video wall applications, or remotely download updated video content for menus and other intelligent signage applications.

The third new HD player is the v-Hd1020. It combines the triggerability of the v-Hd120 with the Ethernet connectivity of the v-Hd220.

#### Shared HD player features include:

- Delivers Full HD 1080p video playback with no moving parts to wear out or break
- HD-quality video is stored on a removable SdHC (up to 32GB) or SdXC (up to 2TB)
- flash card
  HDMI and VGA video output connections support 1080p (HDMI only)1080i, 720p,

 Optional VGA to Composite/S-Video converter for retrofits of Standard Definition displays.

#### Shared XD player features include:

- Powerful video engine capable of decoding two 1080@60p videos or several lowerresolution videos simultaneously
- Simultaneous playback from local, networked and streaming content sources
- Accelerated JPEG decompression for instant image display
- Abundant content support- Full HD videos, images, audio, HTML5, streaming content, 3D content and Live Text
- UDP controls supported via Ethernet Port
- Video wall support including mixed screen orientations and unusual display shapes
- Streams a wide range of content including video, audio, Live Text and media feeds
- Built-in networking to update and manage your signage remotely
- Internal micro SD card slot for secure content storage and playback

Just like the older models, these new players will all work with our <u>GilderScript</u>, that eliminates most configuration when installing BrightSign players. ~ G Background Triggering Videos from Switches, DMX-512 or a Show Controller

When it comes to triggering a BrightSign player, you have many choices. If you just need your player to fire up and loop one or more AV files, you can throw your files onto a Sd card and shove it in.

> To trigger A / V files from buttons, you can wire your buttons di-

rectly to the 15 p i n 'GPIO' connector (v-Hd120 or v-Hd1020). Using the <u>GilderScript</u>, you can throw your files into specially-named folders on your Sd card so that it knows which file(s) play on which button press.

To trigger from Gilder-Show Control (or to optoisolate your buttons), you can use a <u>v-HD-to-1/4J6</u>.

To trigger videos from DMX-512 from other GilderGear (or a plain old light board), you can use the <u>v-HD-to-DMX-512</u>. Just bump the DMX-512 channel to a value to play the corresponding videol - G

# RC Servo-Motors Built to Last

GilderGear has a habit of running for decades.

The mechanical devices that we control are not usually so lucky. One of the shortest-lived parts are RCstyle ServoMotors. In the past, we have recommend these only for film shoots, because it wasn't unusual for them to fail in hours.

The latest trend for RC ServoMotors are brushless DC motors. These are the same type of motors which power the Prius, Leaf or Volt cars, just a tad smaller. Without brushes, the only wear parts are the bearings, gears and position sensor.

Futaba has a complete selection of brushless ServoMotors. These use potentiometers for position sensing, so they still have that part to wear out. Futaba claims a "5x lifespan improvement" over their standard ServoMotors, but don't say how long that actually means.

For some truly long-lived RC ServoMotors, Volz has motors with more ball bearings, heavier gear trains, and even contactless position sensing on some models. They have tested these motors through five million cycles. While they may not last for thirty years, these RC Ser-

voMotors should keep running a lot longer than any previous ones. - G

#### SER-DMX: Continued from p.1

- Micro Sd Flash card for a virtually unlimited show capacity. Up to 255 shows can be loaded onto a SER-DMX at one time. In many installations, the SER-DMX can take the place of a lighting board.
- Indicator LEDs for heartbeat, trigger inputs, and ServoMotor outputs.
- Two optoisolated inputs or the RS-232 serial port can be used to start, stop, or access shows.
- The SER-DMX runs on 5 to 24 vdc. If you have a clean Servo power supply, you can run the SER-DMX from the same supply.
- Identical in size and shape to a BrminiBrick8 or a new DAC-Quad. Can be mounted on snap-track, DIN rail (using the optional DIN-Adapt clips), or just screw or Velcro it to the backside of whatever it is controlling. - G

#### How Loud is an Sd-25?

There are two factors determining how much sound comes out of a playback system. The first is the power rating of the amplifier. The second is the size and efficiency of the speakers.

The Sd-25 is rated for 50 Watts of input power, but this is equivalent to the output power of a 200-250 Watt linear amplifier. If you are going to turn it up loud, you will need speakers that are able to handle 150 Watts or more power continuously (not just at peak).

If you want to make a lot of sound, that means you will be needing to move a lot of air. A large speaker is much better at moving air than a small one. That's the reason the speakers in the ballpark are bigger than the ones on your bookshelf at home. You can make a small speaker louder, but it will take a lot more power than it would for the equivalent output level from a larger, more efficient speaker.

The efficiency of a speaker is rated by the sound level measured (in dB) at one meter away from the speaker. This is usually shortened to

'dB/m/w'. A smaller speaker will always have a lower efficiency rating than a larger one.

When we are demonstrating the power output of the Sd-25, we use a pair of <u>DLS-15</u> 15inch, 2-way passive speakers, which is rated at 109 dB/m/w. In our unscientific test, we measure 105 dB peak at one meter. That's just about as loud as it is inside a discotheque! - G



The new S2 pneumatic valve from <u>Enfield</u> <u>Technology</u> combines the EFB controller for closing the servo loop, a differential pressure transducer and a ServoValve in one package.

ENFIELD S2

With most servo valves, if the valve opens too far or not far enough, the only indication will be the positional error in the cylinder. The EFB controller will have to compensate for this error by adjusting the signal to the valve. In the fraction of a second that this takes, the cylinder has already overshot or undershot, which results in a jittery movement.

By adding the differential pressure transducer for 'compliance' to the valve, the onboard EFB controller will know instantaneously if the valve has opened too far or not enough, and can compensate for this even before the cylinder has begun to move. This results in a smoother movement and far better control.

The compliance also allows the S2 valve to smoothly control cylinders from very small  $\frac{3}{2}$  bore) to the very large  $\frac{3}{2}$  bore or larger).

Five wires are used to connect the S2 to 24 vdc power, the feedback transducer and a 0-10 volt command signal from a DAC-Quad or Br-ANA. Two hoses connect to the cylinder, and a supply line feeds in clean, dry compressed air. The S2 will then give you full analog control over your cylinder. If you move it fast, it moves fast. If you move it slowly, it moves slowly. If you stop it mid-stroke, it will repeatably stop in that spot. - G

# Quotes You'll Read Twice

"We are like tenant farmers chopping down the fence around our house for fuel when we should be using Nature's inexhaustible sources

of energy — sun, wind and tide. ... I'd put my money on the sun and solar energy. What a source of power! I hope we don't have to wait until oil and coal run out before we tackle that."

- Thomas Edison

"We are making to be the leader by our quality and to be famous by our service" - A Chinese Manufacturer's Motto

"Technological change is like an axe in the hands of a pathological criminal." - Albert Einstein, 1941



PNEUMATIC / HYDRAULIC SERVOID PN 10M-2B08L SN 00 8 mA / 500 ohms 1000 PS / 0.14 gev g of the

#### New 10M ServoValve From Woodward HRT

While the new S2 valve from Enfield is a very large valve, then newest valve from <u>Woodward</u> <u>HRT</u> (formerly HR Textron) is one of the cutest little ServoValves you've ever seen!

Only about 1-1/8" in diameter and about 1'-1/4" tall, this little gem can control either hydraulic or pneumatic cylinders at up to 1000 PSI! Internally, it is a 'flapper' style of valve, with a frequency response (depending on model) that can exceed 400 Hz. It mounts on a standard .480" diameter port circle manifold.

Don't expect to move a big cylinder with this little valve. There are three different models. The rated flow for pneumatics (at 100 PSI) are from 0.1 to 0.6 SCFM. Rates of flow for hydraulics (at 1000 PSI) are from 0.045 to 0.28 GPM.

These valves will work perfectly with either our EFB-Quad or PID-Quad feedback cards. - G



#### Rack 'em Up!

Our systems are physically very small, so they are usually mounted right on whatever they are controlling. Sometimes you need to mount our gear in standard 19" racks.

We have several 19" rackmount card cages available, and all of our smaller systems can be 19" rack mounted using standard DIN rail. -G

#### **Elevator Sounds**

What's an elevator ride without 'elevator music'? Well, quiet, for one thing.

We have provided sound systems for elevators ranging from entertainment 'elevators' that only move a few inches, to the passenger elevators that ran from ground level straight up to the 110th floor observation deck of

the World Trade Center.

Our Sd-25s make adding sound to an elevator easy. At only a little more than 2 inches square, and only a little more than an inch thick, an Sd-25 will fit into a standard 4" x 4" J-Box or any other tight space. With its powerful Class-D amplifier, it draws very little current, and generates less heat than an LED light bulb. Yet it has the

power to 'blow the doors off' any elevator if you turned it up.

You can mount the Sd-25 behind the control panel or up in the overhead light fixtures (which can also be a good place to tap into power to run the Sd-25). Add a pair of speakers and throw some elevator music on an Sd-card, and you have an elevator with music.

In other instances, we have provided ADAcompliant announcements for the elevator floor stops. Doing this would be simple if you could tap into the elevators control system. A tap across the 'floor' indicators could easily be used to trigger the appropriate announcements. But unless you are an elevator manufacturer, you probably don't want to go anywhere near the elevator's control system.

Workarounds have included RFID tags or our Ir-Tx and Ir-Rx modules to trigger sounds on a floor by floor basis. - G

# Made in the US of A

All equipment which is designed and built by Gilderfluke & Co. is manufactured in the United States of America. -G



# low to.... Using More Than Two Speakers

All of our manuals show a pair of speakers attached to our Sd-25s, Amp-50s or Sd-50 players. If the speakers are capable of it, each one can be loud enough to wake the dead.

What happens when you don't want to disturb the dearly departed? When what you really need to do is spread a sound over a large area using several speakers?

This is easy to do using what is called 'series/ paralleling' the speakers. Using this technique, you can enjoy the maximum output of the amplifier, just spread out over far more speakers. The key is not to let the impedance of the speaker loads get smaller than what the amplifier is designed to



If you wire two speakers in series, the impedance for driving both speakers doubles. For two 8Ω speakers, this means the load for

both in series is  $16\Omega$ .

If you wire two speakers in parallel, the impedance



Speakers: Continued on p.6



#### Speakers: Continued from p.5

for driving both speakers is cut in half. For two 80 speakers, this means the load for both speakers in series is  $4\Omega$ .

By wiring two pairs of speakers in two series strings (each string =  $16\Omega$ ), and then wiring both



those strings in parallel, you end up with one  $8\Omega$ load, spread over four speakers. This can be driven by one side (left or right) of the Sd-25 or Amp-50 speaker outputs. Do the same again, and attach it to the other side (left or right) of the Sd-25 or Amp-50. You now have eight speakers, all running from one Sd-25 or Amp-50

The Sd-50s each have twice the amplifier power of an Sd-25 or Amp-50, equivalent to a 400 to 500 Watt linear amplifier. It can drive one  $4\Omega$  speaker directly, or two  $4\Omega$  speakers wired in parallel, since this would act as if it were a single  $4\alpha$  speaker

load. ~ G

#### App. Note: The Ultimate **Garage Door** Closer

Have you ever accidentally left your garage door opened overnight? Your first response is always an initial shock as you discover your mistake, and then relief if you find that your car, bikes and other stuff is still there, and then disappointment as you realize that all the boxes that have been in the garage since you first moved in are still there too.

We do Show Control. Just as a carpenter sees a hammer as the best tool for a job, we see a Show Controller as the best solution.

For the garage door project, we need one input to sense the door position, and four outputs. This makes a a perfect fit for a BrminiBrick4. The outputs will be used as follows:

- 0.0 Relay to open/close door
- 0.1 Red LED. This is wired to an indicator inside the house, so we can tell if the garage door is open.
- 0.2 Green LED. This is wired to an indicator inside the house, so we can tell if the garage door is closed.
- 0.3 Warning Buzzer. Beeps to warn that the garage door is about to automatically close.

The trigger input to the Br-miniBrick4 is provided by a normally opened magnetic switch (an alarm system window or door switch). This is mounted by the door, so that when the door is closed, the magnet closes the contacts.

Our garage door closer uses only a single pair of wires between the motor and the controller. Since this single pair of wires carries both power and control signals, we can't just hook a relay across it. For this reason, we popped open the garage door controller, and soldered a pair of wires across the back of the button that is used to



#### primary U.S. organizer and fundraiser for the Machao Orphanage in Makueni, Kenya.

The project for the summer of 2012 was to build both a chicken coop and greenhouse to provide sustainable nutrition to the children.

If you would like to help support the facility, or any of the kids directly with school tuition or other aid, more information can be found at www.machaoorphanage.org~G



Magnet (On Garage Door)

1) <u>Br-MiniBrick4</u> Show Controller (<u>Gilderfluke & Co.</u>)

1) PS-12vdc/1.2US Power Supply (Gilderfluke & Co.)

1) 12 vdc Red Indicator LED (<u>Radio Shack</u> (or others))

1) 12 vdc Green LED Indicator (Radio Shack (or others))

1) Magnetic Switch (Radio Shack (or others))

1) 12 vdc Piezo Buzzer (Radio Shack (or others))

misc) wires, screws, nuts and other small parts

1) 12 vdc Relay (Radio Shack (or others))

Today's Shopping List

open and close the door. This wire then leads to one set of normally open contacts on our relay.

There are two shows needed:

- Door Closed:
  - One second Long, 15 FPS
  - Triggered by the closing edge of the magnetic switch.
  - Turns on the Green LED
  - At End: Does Nothing
- Door Opened:
- Five minutes long, 15 FPS
- Triggered by the opening edge of the magnetic switch.
- Turns on the Red LED
- At 4:30 starts beeping the warning buzzer. The beeping gets faster and faster until 4:50, then turns on until the end of the show.
- At 4:55, pulses the relay for one second to close the

garage door

At end, loops back on itself. It will try closing the door again in five minutes, unless the magnet on the door reaches the magnetic switch and starts the 'door closed' show before then.~G

Machao

Orphanage

In addition to her

work with people

with Sickle Cell Dis-

ease, Dr. Carolyn

Rowley, our VP and

CFO has been the

### Custom Product GilderGear Labeling

If you are using a larger quantity of GilderGear, you can order the equipment with your own custom labeling. In this way, you can 'brand' the GilderGear as your own. - G

#### GilderSwag Available for Ordering

As everyone knows, there is no human being more fashionable on this planet than your typical Gilderfluke & Co. Employee.

Now you too can dress just like one!

GilderShirts, Gilder-Chocolates, Gilder-MousePads and other great GilderSwag are

now available from our online web store. - G

### **Custom Design Work**

As time allows, we do custom design work. Most jobs are for clients that need a product to do a specific job that none of our off-the-shelf boards will do. Usually, these have been incorporated into products produced by our clients.

If you are interested in custom-designed equipment, please contact Doug Mobley (doug@gilderfluke.com). - G

## Greatest Hits On CD

We distribute all our printed material and software on a single CD-ROM. Every manual, cut sheet, and

piece of software we offer is all on one disk. These are included with most orders, or are available for a nominal charge. -  ${\rm G}$ 

Classes Anyone? The spacious quarters at Gilderfluke Towers has a permanent display area where we offer classes in GilderGear. We know that our stuff is pretty easy to learn to operate, but if you would like formal classes, they can be scheduled.

If you are interested in training on GilderGear, please contact Carolyn Rowley (carolyn@gilderfluke.com) in our California GilderOffice. - G

# Field Installation & Service

Gilderfluke technicians are available for installations worldwide. You will need to pay all the usual transportation expenses (business class or better airfare, hotel, food, and per diem) in addition to the fee for the technician.

If you are interested in field support and installation of Gilderfluke & Co. equipment, contact Carolyn Rowley (carolyn@gilderfluke.com) in our California GilderOffice. - G

# Gilderfluke Show Plans

We are scheduled to exhibit at the following trade shows in the upcoming year. Most of the equipment described in this newsletter will be on display at these shows. We have free passes for many of them, so contact us if you would like to attend.

#### November 13-16, 2012

#### Booth #1854

International Association of Amusement Parks & Attractions (<u>IAAPA</u>), Orange County Convention Center, Orlando, Florida

#### March 7-10, 2013

National Haunt & Attraction Show, America's Center, Saint Louis, Missouri

#### June 12-14, 2013

InfoComm International, Orange County Convention Center, Orlando, Florida

#### November 19-22, 2013

International Association of Amusement Parks & Attractions (<u>IAAPA</u>), Orange County Convention Center, Orlando, Florida

**Our Two Most Asked Questions** 

In the more than twenty-eight years we have been in business, the second most commonly asked question is where our company's unusual name came from.

Eli Gilderfluke was an 'inventor' whose illustrations appeared in railroading trade magazines in the 19th Century. A precursor of Rube Goldberg in the 20th Century, he developed strange inventions for steam trains. These were things like a big scoop to catch the exhaust coming out of the smoke stack and feed it back into the engine's firebox. The verb "to Gilderfluke" something eventually came to mean improvised repairs (i.e.: "Jury-Rigging") on a piece of machinery. To the right is 'Gilderfluke's Perfected Locomotive' from the December 1897 issue of Railway and Locomotive Engineering Magazine.

The answer to the most commonly asked question is: 'No, we don't build animated figures'. - G



# Who Are We?

Gilderfluke & Company was founded in 1983 to build Animation & Show Control Systems for theme parks, museums, and other entertainment venues. In 1988 we added Digital Audio Playback Systems to our product line, and became the first company to be able to provide the entire electronics package for your animated show or attraction.

We currently deliver an average of four or five systems a day. We are the only company that delivers complete, off-the-shelf Animation & Show Control Systems from stock. Most systems are bought by Animation Manufacturers for incorporation into their shows. They are simple enough to be installed by anyone.

Our **PC**•**MACs** Animation & Show Programming Systems were the first to run under Microsoft's Windows. It is still the technological leader among Animation Programming Systems. Our 'Brick'

Show Control Systems are the largest selling Animation & Show Control Systems in the world. These are modular systems which can be used to control any size show you can imagine.

Our Digital Audio Systems are led by our **Sd-10**, **Sd-25** and **Sd-50** Industrial-Strength Mp3 players. These store audio on standard MMC/SD Flash cards for any installation where you need a sound to play reliably and with zero maintenance; forever. Our systems are modular. Systems with two to thousands of outputs are can be made with our repeaters.

**Sd-50** players are also available with an option that adds eight or forty digital Show Control outputs, DMX-512, MIDI and serial ports to them. This turns them into a total Audio and Show Control playback solution. The GPS option allows shows and sounds to be scheduled, accurate to a thousandth of a second. -G

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