

P.A.



PC & TABLET BASED CONTROL SYSTEMS **INFORMATION AND WARNING FOR SCHOOLS**

There are a few vendors out there today offering different solutions for school bell timers and play out for PA systems. Some of these solutions appear on the surface to;

- Offer superior flexibility, allowing any file to be scheduled to play at any time;
- Supposedly be “simple to use” and “easy to program”;
- Be “networkable”, i.e. they can tie in with other networked computers or systems.

All of these solutions revolve around use of a *dedicated program running on a Windows PC or Laptop, or a Google based “app” running on a Tablet or even a Mobile Phone.*

PA MATTHEWS AUDIO DO NOT OFFER PC / TABLET BASED SOLUTIONS.

AND HERE'S WHY:

- 1.) Modern PC's and Tablets are built as CONSUMER GRADE PRODUCTS. The hardware is designed to operate intermittently, not continuously. They are a “mass produced” electronic product, built down to a price point with components expected to last around three to five years in service. Batteries (in particular) are designed with a shelf life of less than three years. Audio connectors are of the cheap inferior domestic “headphone” variety, which quickly corrode and cause problems when used continuously.
- 2.) Manufacturers and software developers for PC's and Tablets change and update their product range frequently. As they get older, spare parts and updates quickly become difficult to source. Computer importers rarely keep parts for any product beyond 3 years. In some cases, they don't even stock spares at all - preferring to simply replace a product should it fail. Even within the warranty period.
- 3.) Most PC's and Laptops have notoriously inaccurate internal clocks. Errors of +/- 10 seconds per month are very common. This is completely unacceptable for a school time signal system expected to operate continuously for years on end without attention. Most Tablets use untested and unreliable overseas time standards to set their clocks. These may not even be available unless the tablet is connected to the internet. Over time these “free” sites disappear or change. The result is that the internal clock on the tablet becomes wildly inaccurate.

Because of this, PC and Tablet based solutions quickly become very difficult to repair when they fail. Invariably when this happens, they will require expert attention to replace the entire system and software and reprogram it to get your critical system “back on the air”.

These repairs are usually expensive. They may take weeks to implement. All the while, the school waits without any working system that is otherwise vital for their day to day operations!

PA Matthews Audio have found most PC and Tablet solutions rarely last beyond 3 years before they need expert attention and even total replacement. We consider that any component (hardware AND software) used in a School Bell System needs to have a minimum 10 YEAR service life span. That means that after installation, we can expect our systems to remain operational for at least 10 years without needing any component replacement during that time (unless damage is caused by external factors).

In the unlikely situation that components do need replacement, they are readily available ex stock, cost effective and simply “plug in” with no need to change your system.

THE PA MATTHEWS AUDIO—BELL TIMER CONTROL SYSTEM

Now in use in over 200 NSW Schools

The PA Matthews Audio Bell Control System is built around three independent components;

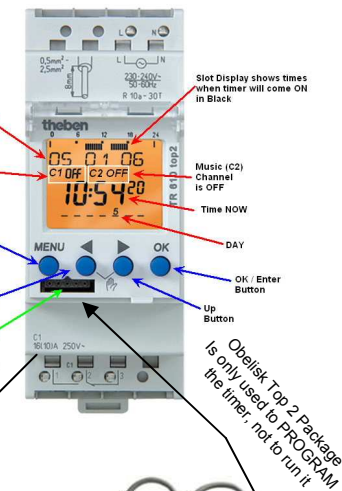
A Conventional Building Automation Timer

The Theben range of automation timers are a stand alone, compact and autonomous unit manufactured in Denmark. They are a **commercial grade product** designed for use in electrical, air conditioning and building automation applications, where *life span is expected to exceed ten years*.

Theben (De) have proven to be a particularly stable manufacturer. Product life span (i.e. the time for which a single model remains available ex stock) generally exceeds *20 years or more*. That means in the unlikely possibility that your timer needs to be replaced, cheap and identical **replacements are readily available** and stocked right here in Australia by reputable wholesalers. This means you're back on the air within minutes. Not weeks!

The Theben TRTop2 range includes PC programming software that allows clients to easily create and modify timer programs using Windows based software. The software is only used to create the programs. The timer itself does all the hard day-to-day work. The Top2 Obelisk software has proven to be particularly stable across multiple Windows platforms (it runs reliably on anything from XP right through to the latest versions). The USB programmer comes with it's own driver software pre loaded on to the device. Updates (if they are ever needed) are readily available from Theben's own web site.

Again, all the "heavy lifting" is done by the timer itself – not the PC – which is only used to *make changes* to the timer. Alternatively, programming and changes can also be readily accessed right from the front panel of the timer itself at any time using our easy step by step instructions.



Timer controls Start and Stop of Bells and Line Up Music



PA Matthews Audio provide either a 2 channel or 4 channel timer. The TR622top2 (2 channel) unit can control a bell signal plus one "line up music" file or song. The TR644top2 unit (4 channel) can control a bell signal plus up to three different "line up music" files or songs.

A "Ten Spot" MP3 player

The Altronics A1741 "Ten Spot" player is a simple SD card based device. A total of ten different MP3 Audio files can be controlled either by the timer channels or by fixed switches on our custom built control panels.

The Altronics A1741 has proven to be a reliable, stand alone product. Made right here in Australia by a reputable Australian company, it has been on the market now for over eight years. It is a **commercial grade product designed specifically for PA system installations**.

Music and Tone files can be readily changed or updated using any computer or device that reads SD memory cards either now or in the future. Back up SD cards can be easily created so that any problem can be instantly tested and corrected just by swapping cards.

Most problems can be resolved over the 'phone without the need for a service call visit. In the unlikely need that a replacement is required, the A1741 is cheap and readily available. We can have you back on the air within minutes.

Evac and Lockdown tones controlled by REAL SWITCHES—not a touch screen

Our Custom Built Control Panels

Our control panels are built especially to make control of your system **super easy**.

No dodgy touch panels. No complicated computer interfaces. Just REAL SWITCHES, with real labels. Written in ENGLISH.





Our control panels are built right here in Australia using standard, commonly available low cost electronic parts. You get a full 10 page ENGLISH instruction manual, telling you everything you need to know.. and nothing you don't.

In addition, you can always refer to our website for further assistance, which features you tube videos showing you exactly how to use and program your system.

Conveniently available in either Rack Mount or Wall Mount versions to suit every installation challenge.

Together these three components come together to form the ultra reliable *PA Matthews Audio Bell Control System* – now installed in **over 200 NSW schools.**

Whilst our system may not have every single feature that the new guys have, we'll happily lay bets on who'se system will still be there, working tirelessly and reliably in ten years (or even five years) time. This system is a true "set and forget" solution. You can easily change files or times every week or just leave it alone for years without worry. *The choice is yours.*

For schools that are still looking for the functionality that only a PC based solution can provide, we recommend that you consider installing BOTH SIDE By SIDE.

That way, the reliable PA Matthews Audio system can sit there silently, still ready to provide critical emergency tones while the PC sits there doing it's thing with your bells and music. When the inevitable PC Crash happens (and it *will!*) just switch on the PA Matthews Audio system and let it run while you take time to sort out the PC's woes.

END OF DOCUMENT