

AD Series Shelf-Edge

A GUIDE TO USING BATTERY POWER

Using **battery power** for **shelf-edge displays** is a new development in the digital displays market and is becoming popular very quickly. It neatly and simply overcomes the common issue of getting mains power to the shelf-edge and avoids complex and costly installations or trailing cables.

Battery power can be used to support:

- **Auto playback** of movie and other content for **1-3 weeks** depending on screen size, video length and play time/day – ideal for promotions where product is regularly refreshed and merchandisers are regularly on hand to replace or recharge batteries
- **'Activated' playback** of movie and other content where playback is triggered by movement sensor, push button or touchscreen. Displays can be powered for campaign durations of **a few weeks** or batteries scoped to support displays for **a year or more**.

Battery power also makes displays more **portable** enabling them to be placed where they will have **maximum impact** and to be used for different products and in **different locations around the store** without being limited by the availability of mains power.

Battery power is ideal for both **short term and long term promotions**, as combined with the flexible range of AD Series mounting options, no permanent fixings or cabling is required and displays can be installed and removed with the minimum of fuss.

When customers are considering battery powered displays, there are a number of questions around **size, duration, functionality and performance**. This AD Series Guide is designed to answer those questions and help you scope the right displays for your requirements. Of course we are here to advise as well and are happy to answer any questions you may have.



GLOSSARY

ACTIVATED PLAYBACK – content playback is activated by an external action or event such as movement or the pressing of a button

AUTO PLAYBACK – content playback will begin as soon as power is connected

FUNCTIONALITY & PERFORMANCE

Is there a difference in functionality between mains power and battery power?

Whilst all display functions can be supported on battery power, any applications involving continual (auto) playback or playback of a lengthy video clip will use up batteries quickly.

Battery power for these applications is best if batteries can be changed or recharged frequently. With 'activated' content playback, functionality is designed specifically to conserve battery power, targeting playback as closely as possible to when a consumer is present. Features such as push button, movement sensor, touchscreen or product 'lift' will play content when activated, switching the display from an inactive to an active state based on consumer behaviour. For example, a display can be activated to play content for a specified period when a button is pushed or movement is detected and will be in standby mode (no content showing) at other times.

In addition, by using advanced features like the AD Series **Intelligent Play**, the number of times playback will occur during a specified period can be limited and can ensure that content is not reactivated multiple times unnecessarily. It can also be used to limit the number of playbacks per day making battery lifetime easier to quantify.

Is there a difference in performance with mains power and with battery power?

No, response times for activation, content playback quality and screen brightness are all the same on battery or mains power.

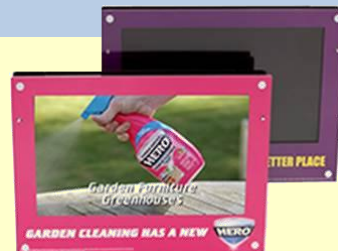
CABLING & COVERS

Can the displays be used with both battery & mains power?

All displays have the capability to run on either type of power supply as standard. Displays can be supplied with both mains power leads and battery connector leads.

Is the battery pack integrated to the display or a separate item?

For 4D batteries, the 3.5" display has an integrated battery compartment with a cover. The 3.5" with larger batteries, the 7" and 10.1" displays have a connector wire to a separate battery pack which can easily be placed at the back of the shelf. Displays can be ordered with connector cable lengths of 600, 1200 or 1800mm. Custom lengths can be provided for volume orders.



AD SERIES INTELLIGENT PLAY

Intelligent Play is unique in the market. Using **smart movement detection** it targets customers intelligently. Using **button press** it delivers further content to your **key target audience** - maximising your **impact** and maximising your **battery life**

AD Series Shelf-Edge BATTERY SIZES & BATTERY LIFE

Activated Playback: As batteries are not used to power continual content playback, battery life in terms of days and weeks is a function of the *duration of the content played* and *how many times a day content playback is activated*. This in turn will depend on your own parameters and needs to be calculated on a case by case basis to scope what batteries best suit your requirements. For example, your priority may be to ensure batteries last as long as possible, in which case you will want to keep your video content brief and use a maximum sized battery pack. However, if you have merchandisers who can regularly change batteries and you want to keep the shelf-edge footprint as small as possible then a smaller battery pack is likely to suit you best. Alternatively you may have a fixed duration campaign and need to power displays for just this period.

Below are two sets of example calculations. The first looks at powering a display for a fixed duration campaign. The second takes the same usage figures but looks at the maximum usage from the three sizes of battery.

Calculating batteries required for a fixed duration campaign



Screen Size: 10"

Functionality: Movement sensor to play attractor video; push button to request more information

Duration of campaign: 45 days

	Estimated activations /day	Video length (s)	Total playtime /day (s)
Movement Sensor video	60	20	1,200
Push Button video	30	25	750
Total video playtime per day (s)			1,950
Add equivalent of 200 s playtime per day to power display			2,150
Total video playtime over 45 day campaign (s)			96,750
Total video playtime over 45 day campaign (hours)			26.88

The table above shows display batteries need to provide 27 hours of playtime to cover the specified parameters. For a 10" display this needs a 12D battery pack (see table below) which at 28.28 hours would also provide contingency.



Auto Playback (continual play): Batteries can be used for continual content playback where the campaign is short (3 weeks or less depending on display size) or where resource is available to change or recharge batteries frequently. Batteries required will depend on how many hours a day the displays are to be playing and what size display is being used. The following table gives the options:

	Total Battery Life (hours)			
	4D battery	8D battery pack	12D battery pack	24D battery pack
3.5" Display	30	48.75	97.5	195
7" Display	n/a	30	48.75	97.50
10.1" Display	n/a	17.4	28.28	56.55

So for example, a 24D battery pack powers a 7" display *continually playing* for around 9 hours a day, 7 days a week for a week and a half. The same battery pack could power a 10" display playing 8 hours a day for a week or a 3.5" display for over 3 weeks.

Calculating battery life – how long will the batteries last?

Many customers ask how long batteries will last, wanting to achieve maximum battery life before replacement. Using the same parameters as in the example on the left, this is calculated as follows:

Screen Size: 10"

Functionality: Movement sensor to play attractor video; push button to request more information

	Estimated activations /day	Video length (s)	Total playtime /day (s)
Movement Sensor video	60	20	1,200
Push Button video	30	25	750
Total video playtime per day (s)			1,950
Add equivalent of 200s playtime per day to power display			2,150
Total video playtime per day (hours)			0.6

Using the battery life table at the bottom of the page, the number of days play for each battery size can be calculated:

	8D	12D	24D
Battery hours	17.4	28.28	56.55
No of days play on example above	29	47	95

To extend the number of days batteries will last, consider shortening the length of the video content. In the example above, reducing the movement sensor video content to 10 seconds gives a new total video playtime/day of 0.56 hours. This increases the number of days play to the figures below:

	8D	12D	24D
No of days play on example above	40	66	131

