



CLEVER PLAY Using Batteries Brilliantly

Using battery power for small displays is brilliant – installation is quick and hassle-free and it opens up new areas of the store for powerful digital promotions. However, using batteries with displays designed and configured only for use with Mains power can bring disappointing results, with limited battery life and sluggish performance.

To achieve startlingly effective performance from your battery-powered promotions, AD Series has developed Clever Play. Clever Play combines the latest in power management techniques with the use of interactive features to drive displays that deliver effective content where and when you need it.

CONSERVING POWER

The aim for most battery-driven promotions is to balance effectiveness with battery life. This is where Clever Play becomes highly effective. It uses the latest in intelligent power management techniques to maximise availability whilst conserving power. Promotions can use batteries to power content running continually, but this isn't the norm as batteries powering continual play need renewing very frequently. Most successful battery driven deployments use some form of sensor or interactivity.

USING INTERACTIVITY

Playing content when your customers are not present to view it is a waste of battery power. Clever Play uses interactive features such as PIR motion sensor, buttons and touchscreen to control the delivery of content. Most common is for a display to use an ultra-low power 'sleep' when no customer is close and to use a motion sensor to trigger playback when motion is detected. Buttons and touchscreens can be used to regulate and control further content delivery.

POWER UP

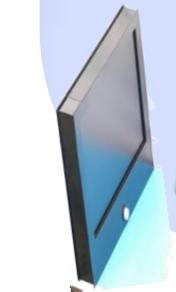
The time taken to change from low power sleep to content playback is critical for battery powered solutions as a customer approaching or touching the display will bring it to life. Clever Play enables displays to boot up instantly every time they are activated, delivering your message immediately and effectively. Many displays on the market take several seconds to power on leaving customers seeing the 'power up' screen and most likely moving on to a more compelling promotion.

EXTRA CLEVER

Without Clever Play, high footfall and busy areas will cause multiple activations of motion sensor or button playing your content continually but with minimal benefit. With battery life measured in numbers of playbacks, early battery depletion will quickly occur. Clever Play has a customisable playback profile which is configured to limit and regulate the number of times content playback is triggered within certain time parameters. Your customers get the message you want to deliver whilst Clever Play controls content playback and battery usage.

POWER MIXING

Many deployments of displays are a mix of mains and battery power. Clever Play auto-detects battery or mains usage delivering seamless performance across all your power environments. Installers and store staff don't have to change settings or manually switch the display from one mode to another; displays automatically deliver mains-style continual playback or battery-style activated playback depending on what power source is detected. Very clever!





BATTERIES with CLEVER PLAY Bringing Power to the Shelf-Edge



Using battery power for shelf-edge displays is a recent development in the digital displays market and is highly attractive to retailers. It neatly and simply overcomes the common issue of distributing mains power to the shelf-edge and avoids complex and costly installations or trailing cables.

However, battery power can appear complex – how many batteries, what type, how long will they last? What type of display works best? What type of content? AD Series now has thousands of battery powered displays deployed in many different environments and we have real experience of how to get the very best out of scoping and deploying both battery and mains powered displays. This guide aims to answer the most common questions.

WHICH DISPLAYS CAN BE BATTERY POWERED?

AD Series Minis (3.5" & 4.3") and Shelf-edge ranges (7" & 10") are most commonly used with batteries. Other sizes can be supported under our custom options. Movement sensor, button and touchscreen features are all supported by battery power. AD Series Cloud displays are not suitable for battery power.

IS DISPLAY FUNCTIONALITY THE SAME AS ON MAINS POWER?

Functionality is not affected by power type, but adjustments need to be made to conserve power when using batteries. In most cases this is achieved through use of a movement sensor. Video length should also be kept short. Continual play of video is generally not recommended unless frequent battery changes are feasible.

WHAT TYPE OF BATTERIES?

We use D-type alkaline batteries as standard for all our displays as these give the best performance to size ratio.

WHAT ABOUT RECHARGEABLE BATTERIES?

Rechargeable batteries have a different cost and logistical profile to alkaline batteries making them more of a custom solution.

HOW ARE THE BATTERIES HOUSED?

Batteries are housed as illustrated in a separate pack with a wired connection to the display. The battery pack needs to be accommodated along with the display on the shelf or in the POS structure. Batteries can be arranged to give some flexibility on pack shape.

HOW MANY BATTERIES?

AD Series Minis use batteries in multiples of 4, Shelf-edge displays in multiples of 6. Our price lists include the most common configurations. The number required will depend on how long they need to last, any size or weight limitations and budget.

HOW LONG WILL THE BATTERIES LAST?

All AD Series displays have been tested with different battery configurations to arrive at total play time for each combination. For applications where batteries power continual content playback, the figures in the table overleaf give total hours of life. For applications where content is activated by sensor or button, then battery life is determined by the duration of the content

played back and how many times a day playback is activated.

CALCULATIONS & EXAMPLES

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 power battery. 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. The calculations and examples overleaf show how to identify the best fit for your promotion.

AD Series
12D Slim Line Battery Pack



Part # BP12D11V2

AD Series
12D Battery Pack



BATTERIES Examples & Calculations



HOW MANY TIMES WILL THE VIDEO PLAY?

The tables below show how many times a 20 second video and a 25 second video will play using AD Series displays and a selection of standard battery pack sizes. Shorter videos mean longer lasting batteries!

Number of plays of 20sec video	4D	8D	12D	24D
3.5" Mini Display	5400	8775	17550	35100
7" Shelf-edge Display	-	7020	10800	21600
10" Shelf-edge Display	-	3132	5090	10179

Number of plays of 25sec video	4D	8D	12D	24D
3.5" Mini Display	4320	7020	14040	28080
7" Shelf-edge Display	-	5616	8640	17280
10" Shelf-edge Display	-	2506	4072	8143

Each display will also use the equivalent of 10 x 20 second video play per day to power sleep mode.

WHAT BATTERIES DO I NEED FOR THIS CAMPAIGN? CALCULATING FOR A FIXED CAMPAIGN LENGTH

If you know how long you want your batteries to last calculate your requirements as in the following example:

Display: 7" with motion sensor
 Campaign: 6 weeks = 42 days
 Video length: 20 seconds
 Average activations per day: 100
 Play time per day = 20 x 100 = 2000 seconds
 Add 200 seconds per day to power the display = 2200 seconds per day
 Total play time required = 42 x 2200 = 100800sec = 28 hours

As a 7" display is being used, then the batteries required to power the campaign are 8D which give 39 hours of play.

Battery Life* with AD Series Displays *Batteries tested at 75% utilisation

Battery life in hours	4D Battery Pack	8D Battery Pack	12D Battery Pack	24D Battery Pack
3.5" Mini Display	30.0	48.7	97.5	195.0
7" Shelf-edge Display	-	39.0	60.0	120.0
10" Shelf-edge Display	-	17.4	28.3	56.6

HOW LONG WILL THIS BATTERY PACK LAST WITH THIS DISPLAY? CALCULATING FOR A GIVEN BATTERY PACK SIZE

You may need a particular battery pack due to constraints of size or budget. To work out how long the batteries will last, calculate as in the following example:

Display: 10" with motion sensor
 Battery pack required: 12D
 Battery pack life: 28.3 hours
 Video length: 25 seconds
 Average activations per day: 50
 Play time per day = 25 x 50 = 1250 seconds
 Add 200 seconds per day to power the display = 1450 seconds per day = 0.403 hours per day
 Divide battery life by hours per day = 28.3/0.403 = 70.22

The batteries in this example will last 70 days (10 weeks)

