

halfminutemedia™

Ad Replacement overview

The system

Detects & replaces broadcast TV advertising...

- Live – no delay to broadcast.
- Broadcast quality advertising playout.
- No degradation of live TV signal.
- Easy to integrate with existing TVs and TV feeds.
- Gets clients' ads onto big screens during key events and 24/7.

Runs branded loops...

- Can be switched to rolling loop of branding and promotions.
- Loops display on existing TVs in venues when not used for Live TV.
- Alternatively model allows Live and Loop to run together on different TVs.

Media monitoring...

- Logs channels being watched out-of-home.
- Logs appearances of TV commercials on watched channels.
- Useful data for on-trade.

Internationally compatible

- Works on PAL or NTSC.
- Various systems to accommodate network scale and connectivity questions.
- Solutions for the small pub as well as large venues with complex AV infrastructure.

Good for Brand Owners

Own ALL the screen ad space in your target venues

- Ads get delivered irrespective of channel being watched.
- High frequency of appearance (every break if required).
- Not restricted to 30" ads – can run 2 or 3 minute clips.
- Eliminate your competitors ads from screens in venues.
- Runs on TVs and projectors – always tuned to key events

Pinpoint targeting

- Ads can be delivered to one site, region or entire network.
- Great for local or regional promotions.
- Great for time sensitive offers – rapid distribution of content.
- Can be combined with SMS return path for voucher distribution, competitions etc.

Fewer advertising restrictions

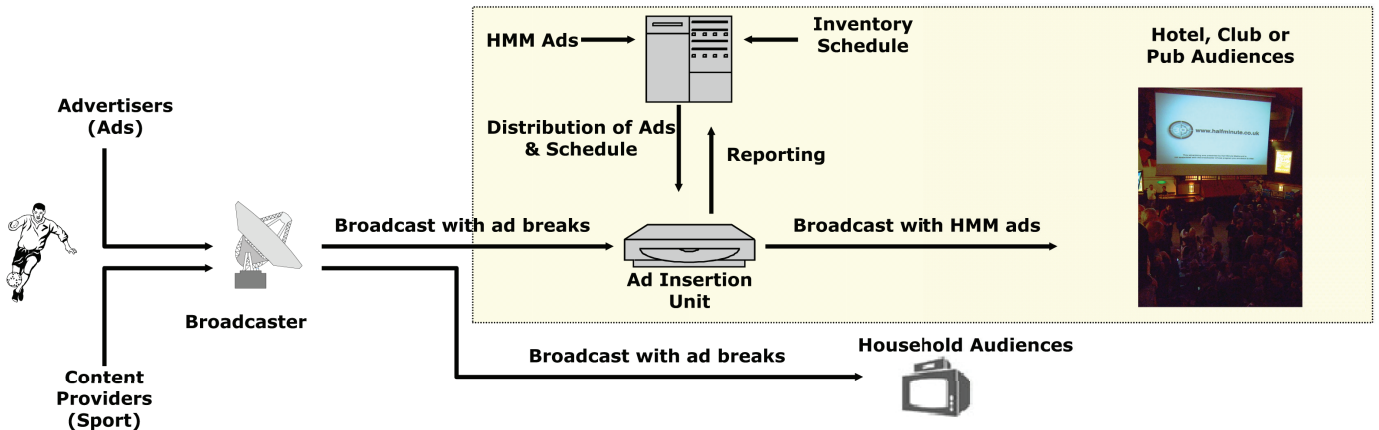
- This is not broadcast advertising.
- Only delivered to pub & club audiences – no watershed, over 18 etc...
- Ads can be a bit more daring.

Value added service to venue owners & managers

- Tool to run own promotions.
- Online tool for generating & scheduling ads – free use.
- Used to run offers and promote events.

How we do it

- Advertising material is received, checked for audio and video formats and stored on our central server.
- A daily schedule (based on campaign start and end dates, position in queue, required venues etc) is created for each venue and the ads are distributed over internet in advance of the required start date.
- The ad insertion unit detects advertising breaks automatically using digital fingerprint matching technology and plays out locally stored ads according to schedule whenever there is an ad break on TV.
- The system can also be manually controlled by an operator who can start or end ad breaks on specific channels from a control panel at any time if required.
- Substitute ads are a series of TV quality full motion ads with a branded intro and outro at each end of the break.



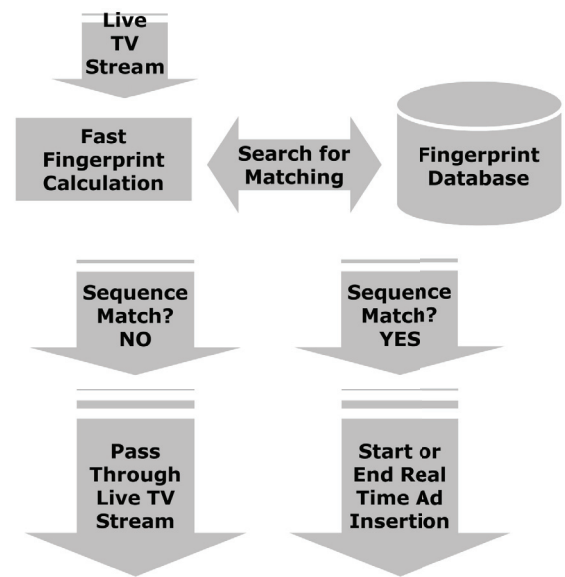
What is a Digital Fingerprint?

- Each frame of a TV stream can be represented by a unique calculated value.
- To obtain a representative value for a frame we divide it up into a grid and for each block in the grid we assign a value based on variables including the colour and brightness of the pixels in that block.
- An average of the values representing each block in the entire grid is then calculated and this number is used to represent the individual frame.
- A sequence of TV frames (e.g. an advertisement) can thus be represented by a sequence of calculated numbers – the digital fingerprint.
- A database of fingerprints of known sequences can be used to identify the same sequences if they reappear in a TV broadcast
- We use values rather than actual images to reduce computing power required and increase speed of matching.
- HMM technology detects and identify adverts in about half a second.



How does HMM use Digital Fingerprints to manage Ad Insertion?

- First we build up a fingerprint database of relevant TV sequences which we know are either:
 - Advertisements
 - Program Titles
 - Sponsorships
 - Ad Break Intros
 - Ad Break Outros
- Each fingerprint in the database is assigned a category that tells the system how to behave if a match is found in the live TV stream being monitored.
- The system performs the same fingerprinting calculation on every single frame of live TV that passes through and compares the calculated value to the database.
- Once a match is made on a single frame, the system tries to match the next live frame with the next frame in the database sequence.
- If 12 or more sequential frames match then the system can tell exactly what is being broadcast and acts accordingly – either starting, continuing or ending an ad break.



Legal, Copyright & IP

System controls the TV, not the broadcast

- TV signal passes straight through when not advertising – no delay or processing.
- AV switch sets TV source to HMM ads during ad breaks.
- Broadcast is unaffected – just not relayed to screens during breaks.

Legal opinions from prominent firms in UK, Australia, Norway and South Africa

- Must start and end breaks with notice that ads are not related to broadcast (“passing off”).
- No copyright infringement if no copy is made.
- No copyright infringement if not in breach of subscription agreements.
- Difficult to change subscription agreements to outlaw channel changing.

German Constitutional Court Ruling, 2004

- Switching off ads not an infringement of broadcaster rights.

Operating in major UK pub and fitness club chains since 2003

- Broadcasters aware - no legal challenges.
- High profile advertisers have embraced the medium.

Several patents granted and pending internationally

Business Models

HMM Venues

- We select groups of venues frequented by key demographics.
- Install at our own cost and sell targeted ad space to relevant advertisers.
- Venues get a revenue share and some space.

Licensing

- HMM supplies and manages network of systems to licensees.
- Licensees sign up venues, agree terms and sell ad space.
- Sometimes licensees are venues owners who use all space themselves.
- Pay HMM an initial cost per box.
- Pay HMM a license fee per site per month.
- HMM operates and manages network of systems for licensee.

Production

- Cost effective professional advertising production.
- Content production for looping systems.
- Charged on time & complexity basis – schedules available.

Development

- New products for new markets.
- Shared development cost + royalties.

More Info

www.halfminute.com

- Technical information, venue lists, etc...

Streaming Demo

- Request link to live online demo of a UK broadcast.

Contact

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