



# Smart Panel



The Smart Panel integrates into bus shelters to provide the travelling public with free access to a range of real-time and interactive digital travel services.

The Smart Panel is designed in partnership with Clear Channel Outdoor to be rugged and can be added to new or existing Clear Channel bus shelters to transform them into modern waiting environments.

Benefiting from state-of-the-art design and technology, the sleek Smart Panels can be deployed as an end panel at the approach or trailing end of a bus shelter or as a back wall panel for cantilever shelter designs.

# The unique benefits of the Smart Panel

## Integral to shelter

To ensure the Smart Panel does not look like an 'add-on' it has been engineered to fit seamlessly into Clear Channel shelters. Furthermore, it is easy and cost effective to install whether the shelter is new or existing.



## Broadcast services

A large high brightness TV-style LCD screen enables real-time arrivals information to be displayed to passengers waiting at-stop. Other travel news (such as disruptions) can be simultaneously displayed 'ticker tape'-style directly below the RTI. Also, real-time news headlines from the BBC can be broadcast to offer passengers a useful and entertaining service which makes the waiting time more pleasant.



## Interactive touch screen services

The easy-to-use DDA compliant touch screen terminal offers free access to on-line journey planning, timetables and local area maps as well as the authority's own digital travel content. A printer allows the user to take away travel information for later reference.



## Wireless connectivity

Wireless broadband technology can reduce ongoing telecom charges by providing a high speed communications link that could also be used for infrastructure such as CCTV and traffic signals.



## Wireless Broadband (Wi-Fi)

Installing wireless communications in the Smart Panel can also create a Wi-Fi hotspot which allows public access to the internet and other services from handheld devices such as mobile phones and pocket PCs.



## The unique features of the Cityspace Transport range

### Contemporary design and finish

As with all Cityspace Transport products, the Smart Panel has a modern and attractive appearance to help project a modern image for public transport. The product can be customised with client colours and graphics to ensure it complements the overall public transport network.

### Low maintenance design

Reducing the need for disruptive work in public spaces and to ensure the structure remains pristine, the Smart Panel benefits from easy fit replaceable parts.

### Rugged steel construction

To ensure the structure is robust enough to withstand continual use by the public over many years it is made from rugged steel.

### Comprehensive support package

For optimum network efficiency the package comprises not only installation, but also comprehensive and continual monitoring. This includes inspection, cleaning, parts and technical maintenance.

### Latest screen technology

To ensure travel information is clearly displayed in all conditions high brightness LCD screens are used for broadcast and touch screen services.

### Small footprint

In order to minimise street clutter all technology and services are housed within a single structure with a single power supply.

## Modular design

To ensure the Smart Panel is suitable for its environment and purpose it has been designed to be modular.

The following choices are available:

### Broadcast screen and main display panels

Depending on the orientation of the shelter, the broadcast screen can be fitted on the side of the Smart Panel where it best serves approaching passengers and buses. If broadcast services are not appropriate then printed timetables, local area maps, promotional material or branding can be displayed on both sides of the Smart Panel.

### Touch screen and extra display panels

A broadcast screen with an interactive touch screen suit most locations. The interactive services can be replaced with cashless ticketing or if only broadcast services are appropriate then an extra display panel can be added.

### Customised finishes

All outside surfaces of the Smart Panel can be customised with client colours and graphics to ensure it blends in with the overall public transport network.

### End or back wall configuration

Depending on the shelter design the Smart Panel can be located on the approach or trailing end or as a back wall panel for cantilever shelters designs.



## Technology options

### Wireless connectivity

If the client chooses wireless communications there is no need to install telecom cables and on-going telecom charges may be reduced. This option can also create a wireless broadband (Wi-Fi) hotspot to allow the public access to internet services from their own wireless-enabled devices.

### CCTV

Monitoring of the bus shelter and its immediate surroundings using CCTV deters vandalism and improves the personal safety of passengers.

### Help point

Voice-over-Internet Protocol (VoIP) technology, with or without a webcam, can be added to provide passengers with access to a travel call centre or emergency services.

### Ticketing

Smart card and cashless ticketing technology can be added to each Smart Panel to support off-bus ticketing programmes and reduce queues and congestion.

# Technical specifications

<b>Broadcast Screens</b>	Hi Bright 17" SXGA LCD TFT panel Brightness 1000 cd/m <sup>2</sup> c/w protective ambient light sensor Contrast ratio 500:1 Protective laminated toughened glass with daylight filter
<b>Interactive Touch Screen</b>	Hi Bright 15" XGA LCD TFT panel Brightness 1500 cd/m <sup>2</sup> c/w protective ambient light sensor Contrast ratio 300:1 Protective laminated toughened glass with anti-reflection and anti-glare filter  Cityspace design in conjunction with 3M Touch screen chassis: incorporating shock absorbency and tool-free maintenance with rapid touch screen replacement Touch screen: 3M Capacitive ToughTouch
<b>Computer (for touch screen)</b>	Processor: Pentium 4 2.8 Ghz Hard disk: 20-40GB Hard disk Internal memory: 512MB RAM Watchdog Timer and network LAN card
<b>Printer</b>	112mm thermal printer Resolution: 203dpi Printable width: 102mm Printable length: 115-360mm (recommended)
<b>Audio</b>	Amplifier: Cityspace amplifier Speaker: Dual integrated 10W speakers
<b>Communications</b>	Wireless broadband ADSL
<b>Software</b>	Operating system: Microsoft Windows 2000; Network protocol TCP/IP Browser: Microsoft Internet Explorer 5.5 with international language support; Macromedia Flash 6 Player; Local web server IIS v5.0  Cityspace kiosk software provides: Secure environment Remote monitoring, diagnostics and hardware management.
<b>Graphical User Interface</b>	Custom designed transport user interface for use on Smart Panel, allowing the public to access a variety of complex data feeds in a user friendly environment. On-screen QWERTY keyboard
<b>Physical</b>	Power supply: 220-240V AC 50/60Hz supply Operating environment: Fan cooled for typical UK outdoor (-10 to 40°C, <90% humidity) Fabric: Mild steel and stainless steel with aluminium extrusions Finish: PPC (Polyester Powder Coat) and applied vinyl Structure dimensions: H 2375mm W 567mm D 528mm (413mm without touch screen) Weight: 150Kg (approx.)
<b>Options</b>	Glazed display panel case Webcam Credit card reader: Magnetic stripe card reader Smart card reader: Contact or contact less Cash acceptance: Notes and/or coins Chip and PIN CCTV Help Point: VoIP or dedicated telephony link Wireless Hotspot 802.11 b/g: 100m line of sight broadcast radius GPRS/3G Enhanced climate options for harsher environments and extreme temperatures

