

iTraffic



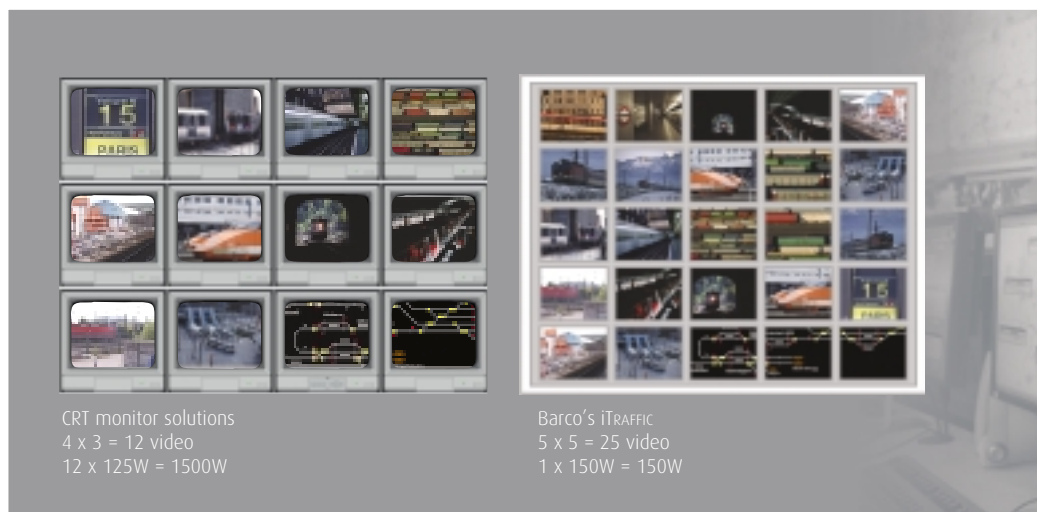
Managed traffic monitoring
and control

i N T E L L I G E N T
i N N O V A T I V E
i N T E G R A T E D
i N T E R A C T I V E



All-in-one solution for managed traffic monitoring

Barco's iTRAFFIC is currently the most advanced visualization solution for traffic monitoring and control. iTRAFFIC provides a Traffic Management Center with the ability to fully integrate visualization sub-systems into their Traffic Management Systems to allow for flexible display solutions, enhanced performance and quality, cost and space savings, and external management of the visualization sub-system by higher level Traffic Management Systems via Application Programming Interfaces (APIs). Physically, iTRAFFIC consists of a range of high-quality displays, Barco's display controller series and wall management software.



Flexible display solutions

Multiple rear-screen projection modules or LCD flat panel displays can be combined into a display wall of any size. Various screen sizes and resolutions are available to allow iTRAFFIC to tailor its display solutions to

the application requirements – in particular to the amount of information that needs to be displayed simultaneously, and the size of the control center.



- Designed for 24/7 operation
- Easy and cost-effective maintenance
- Front or rear access to projection unit
- Lamp replacement in less than a minute
- Average lamp lifetime of 8000 hours in 24/7 operations
- Incorporates reliable, dual auto fail-over redundant lamp projectors
- Flat Panel LCDs resistant to burn in



Dedicated integrated hardware processing for enhanced performance for any type of content

The latest generation of Barco's graphic controllers (Eos, HYDRA, ARGUS) allow for virtually unlimited integration of data and video sources into one comprehensive overview taking into account specific requirements of size, video density and user interaction. As opposed to software-based visualization solutions, the hardware processing provides the user with increased capacity, better performance and quality. For example, in standard software decoding of MPEG-2 streams, the user may only view a handful of full resolution (720x480 D1) images at

full frame rate simultaneously while the iTRAFFIC solution with integrated streaming decoders can view up to 64 images on a single display with one controller. iTRAFFIC offers different controllers that have different capacities. Therefore, depending on configuration of displays and mix of inputs types, the users can configure their systems to have different capacities that best suit their needs and cost requirements. All controllers can support various inputs directly (RGB, SDI, HD-SDI, Composite Video, S-Video, Panellink).

Digital migration ready

Barco's iTRAFFIC features a universal decoder solution that provides an integrated solution thus increasing cost-efficiency as well as facilitating the transition from analog to digital.

With iTRAFFIC, the user

- can replace analog video input cards with digital input cards
- can support analog and digital signals simultaneously in the same controller.

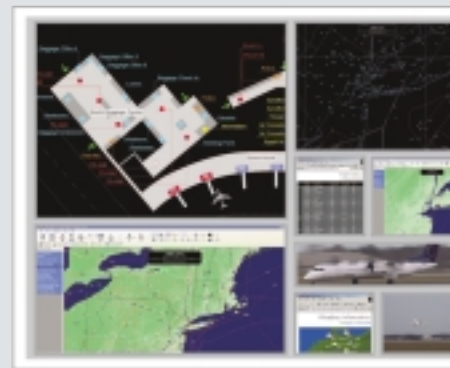
The universal decoder is interoperable in MPEG-2 and 4 over Ethernet (IP) (for the most updated list of encoder manufacturers, with which interoperability has been tested, please see www.barcocontrolrooms.com/en/technologies).



High density video

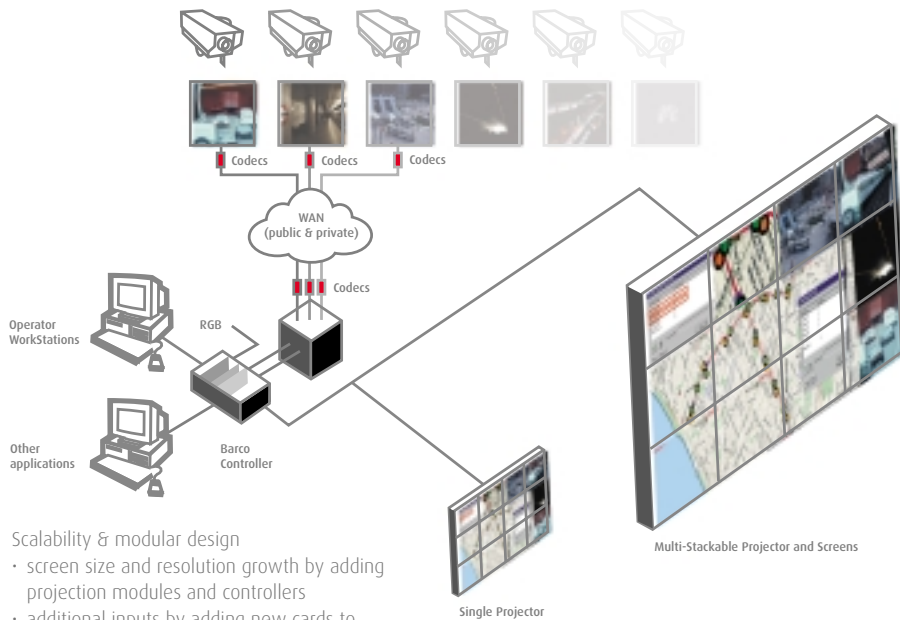


Flexible viewing size and position



Video and computer graphics overlays



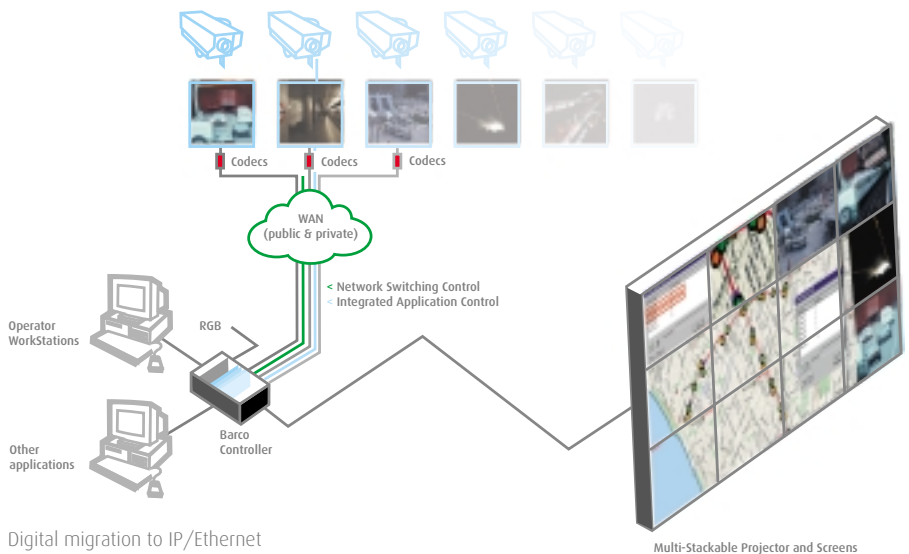


Scalability & modular design

- screen size and resolution growth by adding projection modules and controllers
- additional inputs by adding new cards to controllers



Integrated applications



Digital migration to IP/Ethernet

- can replace analog video input cards with digital video input cards
- can support analog and digital signals simultaneously in the same controller
- Multi-standard decoding supported (MPEG-1/2/4, and M-JPEG-2000)

The integrated universal streaming decoders can provide the customer with the following value added savings

Category	Savings
• Equipment (in \$ costs per channel)	34% to 59%
• Space in Rack Units	7 RU to 48 RU
• Labor (in \$ cost)	86%
• Inventory Levels (in \$ cost)	12% to 59%

Integrated layout management and digital video switching

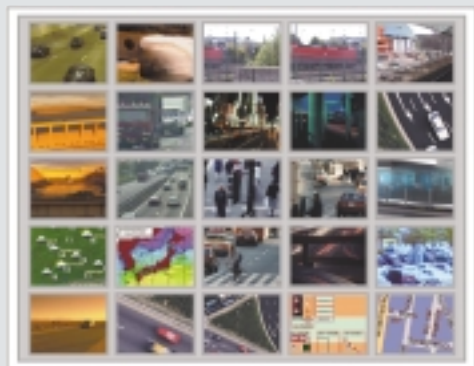
iTRAFFIC software is the first solution in the industry that provides integrated layout management and digital video switching on the large screen displays for a truly end to end digital system.

iTraffic allows the user to:

- select the desired network video stream to be viewed
- assign it onto an already open or new window within the screen
- associate the window to a layout (which can be recalled in alarm conditions)
- design layouts and save them for later recall

iTRAFFIC provides an API for customization and facilitates integration with existing systems.

In essence, the iTRAFFIC software will negotiate with the network to subscribe to any existing stream (in Multicast). It will manage the proper association and resources of the controller and display to properly display the stream according to the user's requests. This happens independently of all existing streams already in place - i.e. it will not disrupt the recording or other active viewers - providing the network has been properly provisioned.



iTRAFFIC provides simple Monitor Stack Replacement from a display perspective, but also allows the user to switch the contents of the various windows



With iTRAFFIC, users can be alerted to special events with visual cues such as enlarged views



iTRAFFIC displays may also be used for pure "data" applications

In summary, iTRAFFIC allows other higher level systems (e.g. Traffic Management Software) to control the visualization system to realize the following benefits for the users:

- Event Associated Displays to facilitate exception based management that can draw proper user attention to manage events rather than require active user surveillance. For example, popping up the video of an accident or traffic jam that has been detected by the Traffic Management Software at the proper size and location of the require display unit.
- Automated Tasks to reduce user effort and intervention to display all relevant information associated to and required for managing an event by consolidating all the information on to the proper display unit in the most effective layouts.
- Facilitate simultaneous control over multiple displays. For example to show specific views (similar or different) across large screen displays, personal walls, and across different control center displays.



iTRAFFIC enables visual integration, i.e. it allows the user to mix and match the various data and video components - even those controlled by sub-systems whose software is not integrated - on one display

To avoid information overload (by extraneous windows that are not actively being viewed), iTRAFFIC can pop up alarm windows of certain applications to attract user attention only when necessary

iTraffic's Application Programming Interface (API)

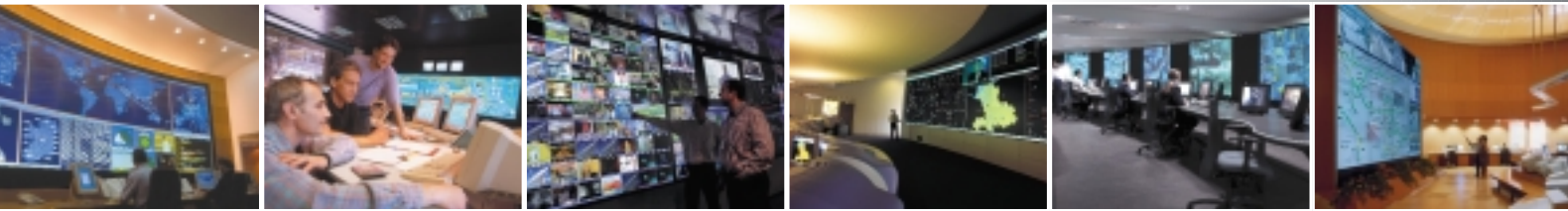
iTRAFFIC's API is published as Web Services (e.g. Windows .NET) to allow quick and easy customization. The API (Applications Programming Interface) is an indispensable component required for the seamless integration of iTRAFFIC into a traffic management solution. Events trigger the traffic management software to initiate a set of actions that

alert the operator. The API allows for changing the content of the wall to generate a visual alert and display available information related to the event. The API is based on Web Services, which has become the open cross platform standard for application interoperability.

Some features of the API:

- start/stop of applications
- changing layouts (e.g. to enlarge a video window)
- insert information onto a video window
- assign video sources to windows (in case iTRAFFIC can trigger the video network)
- SOAP based Interfaces
- optional direct socket communications via TCP/IP

Barco Control Rooms has become the industry standard in the field of monitoring solutions for Control & Operation Centers in telecom, traffic, surveillance, public utilities, broadcasting, finance and service providing companies. Barco Control Rooms is renowned for its flexible, market-specific approach, successfully implemented in over a thousand control rooms worldwide.



Fully committed to quality, Barco Control Rooms offers full technical support as well as on-site training. With its head offices in Belgium and Germany, Barco Control Rooms is represented in more than 30 countries across the globe. With a yearly R&D effort of 10% of its turnover, Barco Control Rooms ensures it remains at the forefront of technology.

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Ref. no. R599732 November '03

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