

# iControl™

iControl AC | iControl DC

## Integrated, intelligent, intuitive: the next generation in elevator control technology

Designed from the ground up using next-generation technology, **iControl** is the revolutionary platform that outperforms today's industry-standard controllers. How? Through integration: A system of components that work together, smoothly and automatically, to deliver the best possible performance.

iControl delivers processing performance through the intelligent iBox processor and motion performance through closed-loop-control, 16K PWM AC or 12-Pulse DC drives.

Configuration, diagnostics, and adjustments are handled through iControlware, a user-friendly software suite designed specifically for iControl. iCue software, running on a centralized dispatcher or an iBox in an elevator group, uses artificial intelligence to make optimal dispatching decisions.

An innovative, maintenance-free landing system uses sensors and magnetic encoding to ensure absolute hoistway position — without tape or switches. iControl's cartop station converts discrete car signals to serial communication for transmission to the iBox, reducing traveler cable bulk and expense.

Through high-tech electronic integration, intelligent buildings maximize efficiency, respond faster to changing user needs, and control resources at the lowest possible cost. It's precisely this kind of building-sensitive, forward-thinking integration that can maximize elevator return on investment and maintenance value — with iControl.



iControl AC

### Applications

- Modernization or new construction
- Low-rise through high-rise — up to 96 stops, as little as one inch between floors
- Gearless or geared, induction or permanent magnet (AC only)
- Groups up to 15 cars
- 1,800 fpm, 9.14 mps

### Benefits

- Intelligent — automated calibration, dispatching and traffic-handling allow iControl to learn and optimize for specific building requirements, increasing owner and tenant satisfaction.
- System self-configures for standard commissioning tests — you select the test, iControl sets up for it.
- Intuitive — Windows-based user interface is easy to learn and use, reducing installation time and maintenance cost.
- Safe — the most direct, advanced solution available, designed for ASME A17.1-2004/ CSA B44-04 code compliance, with robust engineering that anticipates updates.
- Cost-effective — streamlined, field-configurable hardware design. Fewer components to install, maintain or replace.
- Flexible — modular software and hardware layers accommodate changing system needs, gracefully and economically.
- Responsive — robust Ethernet interface facilitates secure remote monitoring, remote equipment control, remote diagnostics, even real time remote troubleshooting and adjustment.
- Create and configure complex car and group installations off site — then upload, remotely or from the machine room. Create and re-use a “golden” file with minor adjustments from job to job.

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800.444.7442  
916.463.9200

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The leader in non-proprietary controllers, technical services and repair solutions for elevator modernization.

## iControl specifications

	iControl AC	iControl DC
<b>Maximum car speed</b>	1,800 fpm, 9.14 mps	1,800 fpm, 9.14 mps
<b>Configuration</b>	Simplex and group	Simplex and group
<b>Landings</b>	96	96
<b>Drive type</b>	16K pulse width modulation flux vector, with optional regenerative drive	12-pulse, fully regenerative
<b>Motor control</b>	Velocity feedback	Velocity feedback
<b>Landing system</b>	Sensors and magnetic encoding ensure absolute hoistway position	
<b>Configuration, monitoring and reporting</b>	iControlware suite for monitoring and changing state of controllers/dispatchers. Includes iView, iMonitor and iReport	
<b>Dispatching</b>	PC-based or embedded microcontroller software intuitively assigns hall calls to controllers	
<b>Environment</b>	32–104°F, 0–40°C, humidity non-condensing up to 95%; harsh environment rugged service options available	
<b>Standard enclosure</b>	42" w x 72" h x 16" d, 914.4 x 1,447.8 x 304.8 mm Enclosure size may increase per specific application	

## iControl features

Powered by intelligent iBox processor and closed-loop 16K PWM AC Drive, or 12-Pulse DC Drive, and supported by integrated system components:

### Intelligent dispatching software

- Powerful, software-based dispatching engine uses artificial intelligence to continually optimize dispatching decisions.
- Easily modify, refine and scale configuration to meet changing traffic patterns.
- Modular upgrades ensure long-term performance, flexibility and return on investment.
- Real-time car status information delivered via high-speed, high bandwidth network for optimized response.

### iControlware suite

- Windows-based interface enables on-site or remote analysis, diagnosis and parameter adjustment.
- Easily set up and adjust controller configuration.
- Conveniently and flexibly manage multiple elevators and locations from a single PC.
- Client-server system gathers, archives and reports elevator performance data for on-site or remote access.
- Flexible programming options for on-demand or scheduled reporting of performance criteria.

### Precision landing system

- Innovative system uses sensors and magnetic encoding to ensure absolute hoistway position.
- Maintenance-free operation with fast, easy cartop installation and adjustment.

### Cartop wiring connection box

- Reduces traveling cable wires for labor and material savings. Plug-and-play installation reduces setup time.
- Traveler and hoistway cable tailored for iControl. All conductors clearly labeled and color-coded. Eliminate connection errors and save installation time.
- Prevents doors from opening unless car speed is within acceptable limits.
- Maintains absolute position of the car during a power failure.