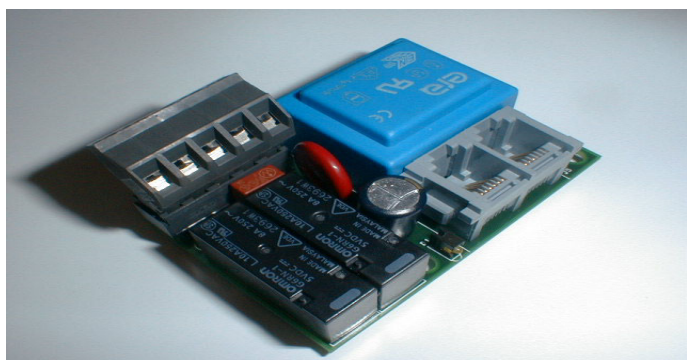




## IMC100™ - Intelligent Motor Controller



### Intelligent Networkable AC Motor Controller

The Intelligent Motor Controller IMC100™ is a state-of-the-art device designed to control AC motors such as those used in drapery or curtain applications. Its incredibly small size enables the unit to be positioned within the drapery headrail or within a standard J-BOX. A built-in microprocessor allows multi-stop capability (closed, half-open and open for instance) in addition to enabling the system to be controlled from any home automation system. Unique to the IMC100™ is its communication and control advantages. The IMC100™ implements communication standards adopted by the computer industry (rather than proprietary standards) that allow for up to 65,025 distinct IMC100™ controllers to be *interconnected* and *controlled* from virtually any distance (up to 4000 feet) using an inexpensive, low-voltage communication bus (using standard CAT5 or CAT3 wiring)!

The IMC100™ System is typically deployed in residential or commercial locations to control vertical or horizontal draperies and blinds. A breakthrough in technology allows a much simpler wiring topology to be used (daisy-chain versus home-runs for each device) thereby eliminating the time and expense of more-costly dedicated home runs of low and sometimes high-voltage wiring often required by competitive systems. In fact even the largest system can be installed without repeaters or separate zone-type limitations.

This is the favored choice among vendors already experienced with “intelligent” drapery controllers. The ability to control a system using whatever **means the homeowner desires** is often a challenge. The IMC100™ allows control from as simple a device as a wall keypad, to more flexible devices including IR remotes, RF, as well as standard wall keypad devices as well as low-voltage and dry-type switched contacts.

### FEATURES

- ❑ **Easy J-Box or Drapery/Curtain Rod Installation**—Miniature programmable controller integrated wall plate assembly can be easily installed within a single gang J-BOX or a drapery assembly to control the operation of a curtain or drapery. No special electrical housings required.
- ❑ **Build-in Auto Sensing Technology Enables Multi-Stop Capability** — A built-in microprocessor combined with auto-sensing technology enables multi-stop capability (between 10% and 90% opened) besides offering standard full open and full close choices.
- ❑ **Intelligent Controller**—Built-in current sensing circuit allows multi-stop control of curtains and draperies
- ❑ **Individually Addressable**—Up to 65,025 IMC100™ controllers can be individually addressed and connected together within a large system. Up to 255 units can be installed on a single zone. Additional zones (up to 255 with 255 units on each zone) can be interconnected together using IQA Expander modules..
- ❑ **Local (Built-in) IR Support**—A unique IR receiver built right onto the IMC100™ controller enables immediate IR support without additional connections.
- ❑ **External wall switch support**—A built-in connector allows keypads to be easily integrated using Category II low voltage wiring.
- ❑ **Simplified (Less Expensive Wiring)**—System can be daisy chained without the need of expensive home run installs of low-voltage and/or high voltage wiring. Nearly unlimited bus lengths supported up to 4000 feet. No additional repeaters necessary for long wire runs.
- ❑ **Easy Installation with Third Party Home Automation Systems**—Industry standard RS-485 interfaces permit easy connection to any third party automation system (regardless of length away from control system). Connection to RS-232C requires an adapter.
- ❑ **IP Connectivity**—Integration with web-based appliances including PDAs and laptops offering Ethernet capability.
- ❑ **Sophisticated Programmable Software**—IMC100™ offers complete software programmability including individual device addressibility, low-voltage and high voltage output contact personalization (NC, NO, direction, rotation direction, multi-stop percentage). IMC100™ devices can be programmed with laptop computers or PDAs.
- ❑ **On-Board Low Voltage Contacts**—A pair of on-board low voltage contacts can be used to trigger Controller operation as an input device or can be used as a controller output device to switch low-voltage external signals
- ❑ **Easy Installation** – Pluggable (detachable) power connector for both line voltage and motor control Ac wiring connections.

### Unique Product Family Offering

The IMC100™ is compatible with a family of Converging Systems control devices including the Intelligent keypad (IQA-KPAD-5), the Compact IR handheld remote controller (IQA-IR-12), the Remote RF device (IQA-RFA-1) transmitter/receiver option. Connectivity to industry standard RS-232C devices is available through standard RS-485 to RS-232C adapter modules

### Easy to Customize

A home or commercial automation system needs to be able to customized but without having to learn computer programming. The IMC100™ enables those installers who do not have laptop computers to set individual module addresses (for multi-module systems). And for those installers who are quite familiar with programming, additional features/functionality can be integrated within the IMC100™ as well.

### Built to Last

Design, verification and testing is critical to proper engineering design. In fact, the same engineers and team who have built the sophisticated electronic controllers driving today's most popular printers and copiers have lent their expertise to the IMC/IQA family. Unique technology integrated within the IMC/IQA System eliminates the need for components that have been found to fail within alternative systems. The system is designed to meet the highest reliability targets within the market.

### Significant Return on Investment

The IMC/IQA System's low cost plus its labor saving design features allow for any number of IMC100™ Controllers to be installed and programmed in a shorter time than required with competing systems. Since there is no need for home room wire pulls, only AC lines need to be run to the IMC100™ module (for power) and then an AC power connection needs to be run to the controller motor. If a home automation system is planned, then individual IMC100™ devices can be daisy chained rather than wired in a home run fashion. This saves time and cost from the point of view of the installer and the wiring designer.

## WIRING DIAGRAM

## SOFTWARE FEATURES

### Motor Control

Direction (UP, DOWN, LEFT, RIGHT)  
Rotation (cw, ccw)  
Percentage Up or Down (0%-up, 10%,20%...90%,100%-dw)  
Set Preset (P1,P2, P3, P4, P5, P6)  
Go Preset (P1, P2, P3,P4, P5, P6)

### Motor/Controller Status

Preset Status (location)  
IR Settings (enable, disable)  
Percentage Up or Down (%)  
Set Preset (S1, S2, S3, S4, S5, S6)

### Low Voltage Control

Low Voltage Output (latched, momentary, NO, NC)  
Low Voltage Trigger (map input type with motor operation)  
Over 61 different controls possible

## SPECIFICATIONS

Motor Control	Control of a single 1/8 hp. Bi-directional AC motor (two directions) 120V 1.0 amp AC. Relays certified to 8 amps. Fuse protection at 4 amps. Built in surge suppression.
Motor Sensing	Built-in load sensing circuitry can be used to provide multi-stop capability.
Ext. Input/Cntl.	On-board 3-pin header is designed to connect to IQA keypads or off the shelf switches, magnetic switches or X10 for input control.
Ext. LV Output	On-board 3 pin header can also be programmed to provide a pair of dry contact closures for advanced control requirements
IQ Pass Through	Unique circuitry permits failsafe operation for all units on the bus even if one Controller device fails or shuts down for lack of power.
Addressibility	Individual addressibility for up to 65,025 Controllers.
Commun.. Bus	Industry-standard RS-485 bus. Dual RJ—11 connectors for pass-through.
Zone Limits	Up to 255 Controllers can be daisy-chained per zone. Up to 255 zones can be linked together using bridge interconnects.
IR Control	On-board IR receiver allows control of IMC100 systems. Range 33 feet.
RF Control	IQA-RFA-1 module plugs into RJ-11 connector on IMC100™ Controller.
IP Control	IQA-IP-1 Controller plugs into RJ-11 connector on IMC100™ Controller
Board Size	1.8" W x 2.75" H x .5" D 46 mm (w) x 70mm (h) x 13mm (d)
Power	120VAC, 50/60 Hz, __ amps
Weight	4 oz. (.11 Kg.)
Manufacturing	Made in the USA
Compliance	PCB UL listed

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