

Mainpine IQ Express

Regulatory Notices

United States

Canada

European Union

Australia

New Zealand

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This document contains national requirements for proper operation of telecommunications equipment within the regions listed. The document supplements the Quick Start Guide that accompanies each product.

IQ Express identifies a range of analog interface boards. The notices included in this document cover a range of board variants with two, four, or eight analog interfaces.

These notices must always be included with each product. Failure to provide this guide when supplying the product will invalidate the approval for that product.

International Regulatory Notices

The notices provided in this section should be observed to ensure the proper and safe use of this product worldwide. They shall be supplemented by the notices from subsequent sections that apply in a specific region.

Safety

Users of this product, and service personnel, must refer to the Safety information included in the documentation supplied with the product, and with any host computer into which the product is to be installed.

IQ Express boards are approved for installation in a host computer, and with host attachments, which are covered by a relevant type approval of their own. The host must fully enclose the IQ Express board, except for the face of the End Bracket.

It is a condition of approval that the power required by the host and the total of all adapter boards installed within the host environment, together with any auxiliary apparatus, does not exceed the power specification as stated in the Technical Reference Manual of the host apparatus. The maximum power required by this product is 3A @ +3.3V.

The analog telecommunication interfaces of the IQ Express boards are intended for connection to telecommunication network voltage (TNV) circuits that may carry dangerous voltages. The interface cord(s) must remain disconnected from the telecommunication network until the board has been installed within a host that provides the necessary protection of the operator.

If service personnel subsequently require to open the host equipment for any reason, the telecommunication interface cord(s) must be disconnected prior to effecting access to any internal parts that may carry telecommunication network voltages.

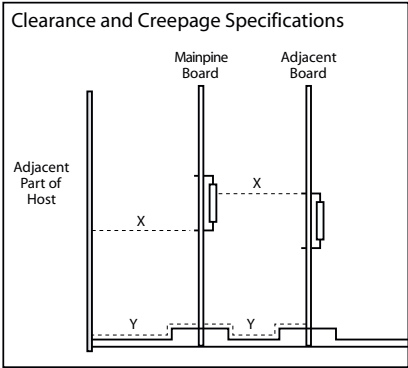
In order to maintain the host-independent approval for the network interface, it is essential that, when other option boards are introduced which use or generate a hazardous voltage (as defined in IEC/EN 60950-1), the minimum creepage and clearance distances specified in the table below are maintained.

The board or assembly holding the network interface must be installed such that, with the exception of the connections to the host, clearance and creepage distances shown in the table below are maintained between the board or assembly holding the network interface, and any part of the host, including other option boards or assemblies. Failure to maintain these minimum distances will invalidate the approval.

X mm	Y mm	
2.0	2.4	< 50 Vrms or Vdc
2.6	3.0	<125 Vrms or Vdc
4.0	5.0	<250 Vrms or Vdc
4.0	6.4	<300 Vrms or Vdc

The above creepage distances apply in a normal office environment. In the presence of conductive pollution, or voltages greater than 300 V (rms or dc), or if you have any doubt, seek advice from a competent telecommunication safety engineer before the installation.

Creepage and clearance distances can be checked by measuring between the adjacent parts as shown below. Clearance distance X is the shortest distance in air between two parts. Y is the length of the creepage path between the same two parts.



It is not intended for this product to be installed in a home or residential environment. It is not intended for this product to be installed or operated in a stressful or inordinary environment such as industrial sites, medical applications, or in flammable/explosive environments.

Telecommunications

The telecommunication interfaces of this product are configurable. For information on setting the product configuration, see the IQ Express Programmer's Manual. The developer/installer must ensure that the interfaces are configured to give an implementation that complies with the services offered by the local Public Switch Telephone Network (PSTN) operator. Application developers implementing supplementary services at application level must ensure that their implementation complies with the services offered by the local Public Switch Telephone Network (PSTN) operator. In case of doubt, network specifications must be consulted.

Regulatory Specifications and Declarations

Specifications Demonstrating Compliance

Safety Compliance

USA: Canada:	UL Listed to U.S. and Canadian safety standards. File number E7????? UL/CSA 60950-1 – 1st Edition – 2003
Europe:	EN 60950-1: 2001 including National deviations
Australia: New Zealand:	AS/NZS 60950: 2000 - for national variations to IEC (below).
International:	CB Certificate to IEC 60950-1: 1st Edition (2001-10), with National and group differences according to CB Bulletin No 103A

Electromagnetic Compatibility (EMC)

USA:	FCC, 47 CFR, Part 15, Subpart B - Unintentional Radiators, verified Class B digital device
Canada:	ICES-003 Issue 3 – Nov 1997 - Class B, Digital Apparatus
Europe:	EN 300 386 V1.3.2 (2003-05) ERM; Telecommunication Network Equipment; EMC EN 55022: 1998, Class A Limits, ITE Radiated & Conducted Emissions EN 55024: 1998, ITE Immunity Characteristics EN 61000-4-2, ESD Immunity EN 61000-4-3, Radiated Immunity EN 61000-4-4, Electrical Fast Transients/Bursts EN 61000-4-5, AC Surge (AC powered products only) EN 61000-4-6, Conducted RF Immunity EN 61000-4-8, Power Frequency Magnetic Fields EN 61000-4-11, Voltage Dips and Interrupts
Australia: New Zealand:	EN 300 386 V1.3.2 (2003-05) ERM; Telecommunication Network Equipment; EMC
International:	CISPR 22 Ed 4.0 (2003-04), Class B Limit

Telecommunications Compliance


USA:	TIA-968-A – Oct 2002, Subpart 4 and TIA/EIA/TSB-168 FCC Part 68 rules as adopted by ACTA ACTA Product-Labeling number; US: MPLMM08BIQEXPRESS
Canada:	Industry Canada CS-03 Issue 8 – A6 June 2002, Part II Registered number; IC: 5415A-IQEXPRESS
Europe:	R&TTE Radio & Telecommunications Terminal Equipment Directive 99/5/EC

Declarations of the Manufacturer or Importer

The International Declaration of Conformity for this product is copied below, or can be downloaded from: <http://www.mainpine.com/>

No. DOC09APR08-KS1

Declaration of Conformity

MAINPINE

This Declaration of Conformity is issued by the indicated company which is solely responsible for the declared compliance. The compliance is valid ONLY for the equipment identified when used in a manner consistent with intent of the referenced documents.

Equipment Type/ Model: Mainpine® IQ Express™ Products

The equipment listed is declared to be compliant to the following applicable national and international standards:

Document no. / Edition / Date of Issue	Title
EMC:	
FCC Part 15, Class B	United States Code of Federal Regulations, Radio Frequency Devices, Unintentional Radiators
ICES-003, Class B	Industry Canada Interference-Causing Equipment Standard, Digital Apparatus
EN 55022:1998, Class B	Information Technology Equipment – Radio Disturbance Characteristics – Limits and Methods of Measurement
EN 55024:1998	Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurement
CISPR 22:1997, Class B	Limits and Methods of Measurement of Radio Disturbance Characteristics of Information Technology Equipment
AS/NZS 3548:1997, Class B	Limits and Methods of Measurement of Radio Disturbance Characteristics of Information Technology Equipment
Safety/Low Voltage:	
IEC 60950, 3rd ed. + Amendment 11	Safety of Information Technology Equipment
EN 60950, 3rd ed. + Amendment 11	Safety of Information Technology Equipment
UL 60950, 3rd ed.	Safety of Information Technology Equipment
CAN/CSA-C22.2 No. 60950-00, 3rd ed.	Safety of Information Technology Equipment
Telecom:	
FCC Part 68	United States Code of Federal Regulations, Connection of Terminal Equipment to the Telephone Network
TIA-968-A – Oct 2002, Subpart 4	Technical Requirements for Connection of Terminal Equipment to the Telephone Network
IC CS-03, March 2001, Parts I and VIII	Harmonized Requirements For Terminal Equipment, Terminal Systems, and Registered Protection Circuitry (Part I)

European Union:

The responsible company declares the equipment in compliance with Council Directive 89/336/EEC (EMC), Council Directive 73/23/EEC (Safety/LVD) and Council Directive 1999/5/EC (R&TTE).

Responsible Company:		Signature of Authorized Representative: (European Union)	
Mainpine Limited, 73 Leigh Park Road Bradford on Avon, Wiltshire, BA15 1TG England U.K.			
		Name: Kevin Sharpe	Date: 9 April 2008

Australia and New Zealand:

The responsible company declares the equipment in conformance with product standards CISPR 22 and AS/NZS 3548, Limits for Radio Frequency Emissions for Information Technology Equipment, Class B, as required under both the Australian and New Zealand Radiocommunications Acts.

Responsible Company:		Signature of Authorized Representative: (Australia & New Zealand)	
Mainpine Limited, 73 Leigh Park Road, Bradford on Avon, Wiltshire, BA15 1TG England U.K.			
Supplier Code:	ABN:	CAN:	Name: Kevin Sharpe Date: 9 April 2008

United States and Canada:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Registered Numbers: US: MPLMM08BIQEXPRESS IC: 5415A-IQExpress

Responsible Company:	Regulatory Agent for Service: (USA)	Signature of Authorized Representative: (USA and Canada)	
Mainpine Limited, 73 Leigh Park Road Bradford on Avon, Wiltshire, BA15 1TG England U.K.	Mainpine, Inc. 9450 SW Commerce Circle, Suite 401 Wilsonville, Oregon 97070 USA		
		Name: Kevin Sharpe	Name: Kevin Sharpe Date: 9 April 2008

IQ Express Regulatory Notices

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Regional Regulatory Notices

United States Regulatory Notice

Safety

The IQ Express boards are for use only with UL listed computers that have installation instructions detailing user installation of card cage accessories.

EMC - FCC Part 15 Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operating in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case, the user is required to correct the interference at their own expense.

EMC - FCC Part 15 Declaration of Conformity

Product Type: Mainpine IQ Express

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For questions related to the EMC performance of this product, contact:

Mainpine Limited
73 Leigh Park Road
Bradford on Avon
Wiltshire
BA15 1TG
United Kingdom.

Telecommunications - FCC Part 68 Statement

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the pcb of this equipment is a label that contains, among other information, an ACTA product-labelling number in the format US: MPLMM08BIQEXPRESS. If requested, this number must be provided to the telephone company.

For this equipment the Ringer Equivalence Number (REN) is 08B, the Facilities Interface Code (FIC) is 02LS2, the Service Order Code (SOC) is 9.0Y, and the USOC Jack Type is RJ11C.

A FCC compliant telephone cord and modular plug is provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack that is Part 68 compliant. See Quick Start Guide for installation instructions.

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of the service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

If trouble is experienced with this equipment, for repair or warranty information, please contact Mainpine, Inc., 9450 SW Commerce Circle, Wilsonville, Oregon, USA 97070. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

Connection to party line service is subject to state tariffs (contact the state public utility commission, public service commission or corporation commission for information).

The mounting of the approved unit in the final assembly must be made so that the approved unit is isolated from exposure to any hazardous voltages within the assembly. Adequate separation and restraint of cables and cords must be provided. The final assembler shall provide in the consumer instructions all applicable customer information.

Telephone companies report that electrical surges, typically lightning transients, are very destructive to customer terminal equipment connected to AC power sources. The use of a surge arrester on the AC line is recommended.

In order for FCC registration of this product to be retained, all other products used in conjunction with this product to provide your telephony function must also be FCC Part 68 registered. If any of the products are not registered, then you are required to seek FCC Part 68 registration of the assembled equipment prior to connection to the telephone network. Part 68 registration specifies that you are required to maintain this approval and as such become responsible for the following:

- any component device added to your equipment, whether it bears component registration or not, will require that a Part 68 compliance evaluation is done and possibly that you have testing performed and make a modification filing to the FCC before that new component can be used;
- any modification/update made by a manufacturer to any component device within your equipment, will require that a Part 68 compliance evaluation is done and possibly that you have testing performed and make a modification filing to the FCC before the new component can be used;
- if you continue to assemble additional quantities of this compound equipment, you are required to comply with the FCC's Continuing Compliance requirements.

Canada Regulatory Notice

Safety

The IQ Express boards are for use only with UL listed computers that have installation instructions detailing user installation of card cage accessories.

EMC - ICES-003

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Telecommunications Attachment

This product meets the applicable Industry Canada technical specifications.

European Union Regulatory Notice

CE Declaration of Conformity

The Products carry the CE mark.



Hereby, Mainpine Limited, declares that the IQ Express products are in compliance with the essential requirements and other relevant provisions of European Union Directives 1999/5/EC (R&TTE), 89/336/EEC (EMC Directive) and 73/23/EEC (Low Voltage Directive).

Manufacturer 's office in European Union:

Mainpine Limited
73 Leigh Park Road
Bradford on Avon
Wiltshire
BA15 1TG
United Kingdom.

To achieve CE compliance, be sure to select a host computer that already meets the EMC and Low Voltage Directives before the addition of any optional board. Remember that the use of option boards declared compliant with the Directives by their manufacturer only gives "presumption of compliance " for the whole system. It is the responsibility of the system supplier to verify that the requirements of the listed Directives are still met by the final system as supplied to an end user. System integrators should take notice of further conditions expressed in the safety and other sections.

[Finnish]

Mainpine Limited vakuuttaa täten että IQ Express tyyppinen laite on direktiivin 1999/5/EY, 89/336/ETY, 73/23/ETY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.

[Dutch]

Hierbij verklaart Mainpine Limited dat het toestel IQ Express in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG, 89/336/EEG, 73/23/EEG.

[French]

Par la présente Mainpine Limited déclare que l'appareil IQ Express est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE, 89/336/CEE, 73/23/CEE.

[Swedish]

Härmed intygar Mainpine Limited att denna IQ Express står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG, 89/336/EEG, 73/23/EEG.

[Danish]

Undertegnede Mainpine Limited erklærer herved, at følgende udstyr IQ Express overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF, 89/336/EØF, 73/23/EØF.

[German]

Hiermit erkläre Mainpine Limited, dass sich dieses IQ Express in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG, 89/336/EGW, 73/23/EGW befindet".

[Greek]

ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Mainpine Limited ΔΗΛΩΝΕΙ ΟΤΙ ΙQ Express ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/?? , 89/336/ΕΟΚ, 73/23/ΕΟΚ.

[Italian]

Con la presente Mainpine Limited dichiara che questo IQ Express è conforme ai requisiti

essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE, 89/336/CEE, 73/23/CEE.

[Spanish]

Por medio de la presente Mainpine Limited declara que el IQ Express cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE, 89/336/EEC, 73/23/EEC

[Portuguese]

Mainpine Limited declara que este IQ Express está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE, 89/336/CEE, 73/23/CEE.

European Union Telecommunications

In the European Union, the R&TTE Directive imposes that each Public Switch Telephone Network (PSTN) operator makes available the specifications of the network services offered. The telecommunication interfaces of the IQ Express boards have been successfully tested against TBR21.

Finland, Sweden, Norway - Additional Safety Requirements

Special conditions apply to the use of this product in Finland, Sweden and Norway, due to unusual earthing arrangements in those countries. These conditions must be noted by:

- customers in those countries, receiving this 'board product' for integration into systems.
- product integrators that install this 'board product' in a host, and create a 'system product' that may be delivered to those countries.

There are two alternative approaches by which the special conditions can be satisfied:

- the use of analog ports must be restricted to connection only to SELV circuits. This means that they must not be connected to "outside plant" signal conductors. They may however be connected to SELV ports of whatever equipment interfaces to "outside lines".

OR

- if TNV connections are to be made to the analog ports, then the following restrictions must be applied to the 'system products' into which this 'board product' is integrated. The 'system product' must fit into ONE OF three categories:
 - Permanently Connected Equipment.
 - Pluggable Equipment Type B.
 - Equipment specified for use only in Restricted Access Locations where equipotential bonding has been applied.

Additionally the 'system product' documentation must contain BOTH OF the following instructions:

- that a Protective Earthing Conductor must be installed by a service person, and must be permanently connected.
- details of how that Conductor shall be installed.

For explanation of the terminology of this section, consult EN 60950-1:2001, and especially Annex ZB - 6.1.2.2.

Australia / New Zealand Regulatory Notice

Safety

These boards must be installed and serviced by suitably qualified personnel. These boards must only be installed by personnel that understand the electrical safety implications of connecting the board to other equipment. In particular, the installer must understand the definition of a telecommunication network and safety extra low voltage circuits.

Telecommunications

The primary role of this product is as Telecommunications Network Equipment.

The product is not considered to be Customer Equipment (CE).

It is the responsibility of the system integrator / network operator to ensure that installations meet Telecommunication specifications in support of interconnect agreements.