



Snell
Advanced
Media

User Manual

IQCAG00

IP Control Aggregation Gateway

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Safety Information

Explanation of Safety Symbols

GB

- This symbol refers the user to important information contained in the accompanying literature. Refer to manual.
- This symbol indicates that hazardous voltages are present inside. No user serviceable parts inside. This unit should only be serviced by trained personnel.

Safety Warnings



"CAUTION: These servicing instructions are for use by qualified personnel only. To reduce risk of electric shock do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified personnel."

- To reduce the risk of electric shock, do not expose this appliance to rain or moisture.
- Always ensure that the unit is properly earthed and power connections correctly made.
- This equipment must be supplied from a power system providing a **PROTECTIVE EARTH** (⊕) connection and having a neutral connection which can be reliably identified.
- The power outlet supplying power to the unit should be close to the unit and easily accessible

Power connection in countries other than the USA

The equipment is normally shipped with a power cable with a standard IEC moulded free socket on one end and a standard IEC moulded plug on the other. If you are required to remove the moulded mains supply plug, dispose of the plug immediately in a safe manner.

The colour code for the lead is as follows:

- GREEN/YELLOW lead connected to E (Protective Earth Conductor)
- BLUE lead connected to N (Neutral Conductor)
- BROWN lead connected to L (Live Conductor)



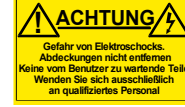
- Caution if the unit has two mains supply inputs ensure that both power cords are plugged into mains outlets operating from the same phase.

Erklärung der Sicherheitssymbole

D

- Dieses Symbol weist den Benutzer auf wichtige Informationen hin, die in der begleitenden Dokumentation enthalten sind.
- Dieses Symbol zeigt an, dass gefährliche Spannung vorhanden ist. Es befinden sich keine vom Benutzer zu wartenden Teile im Geräteinneren. Dieses Gerät sollte nur von geschultem Personal gewartet werden

Sicherheits-Warnhinweise



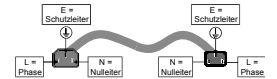
Die angeführten Service-/Reparatur-Anweisungen sind ausschließlich von qualifiziertem Service-Personal auszuführen. Um das Risiko eines lektroschocks zu reduzieren, führen Sie ausschließlich die im Benutzerhandbuch eschriebenen Anweisungen aus, es sei denn, Sie haben die entsprechende Qualifikation. Wenden Sie sich in allen Service-Fragen an qualifiziertes Personal.

- Um das Risiko eines Elektroschocks zu reduzieren, setzen Sie das Gerät weder Regen noch Feuchtigkeit aus.
- Stellen Sie immer sicher, dass das Gerät ordnungsgemäß geerdet und verkabelt ist.
- Dieses Equipment muss an eine Netzsteckdose mit Schutzleiter angeschlossen werden und einen zuverlässig identifizierbaren Nullleiter haben.
- Die Netzsteckdose sollte nahe beim Gerät und einfach zugänglich sein.

Netzanschluss in anderen Ländern als der USA

Das Equipment wird im Normalfall mit einem Netzkabel mit Standard IEC Anschlussbuchse und einem Standard IEC Anschlussstecker geliefert. Sollten Sie den angeschweißten Stecker auswechseln müssen, entsorgen Sie diesen bitte umgehend. Die farbliche Belegung des Netzkabels ist wie folgt:

- GRÜN GELB E = Schutzleiter (⊕)
- BLAU N = Nullleiter
- BRAUN L = P = Phase



- Achtung: Wenn das Gerät zwei Anschlussbuchsen hat, stellen Sie bitte sicher, dass beide Netzkabel mit der selben Phase in die Netzsteckdose gesteckt werden.

Légende :

F

- Ce symbole indique qu'il faut prêter attention et se référer au manuel.
- Ce symbole indique qu'il peut y avoir des tensions électriques à l'intérieur de l'appareil. Ne pas intervenir sans l'agrément du service qualifié.

Précaution d'emploi :



"ATTENTION: Les procédures de maintenance ne concernent que le service agréé. Afin de réduire le risque de choc électrique, il est recommandé de se limiter aux procédures d'utilisation, à moins d'en être qualifié. Pour toute maintenance, contacter le service compétent."

- Pour réduire le risque de choc électrique, ne pas exposer l'appareil dans un milieu humide.
- Toujours s'assurer que l'unité est correctement alimentée, en particuliers à la liaison à la terre.
- La source électrique de cet équipement doit posséder une connexion à la terre (⊕), ainsi qu'une liaison « neutre » identifiable.
- La prise électrique qui alimente l'appareil doit être proche de celle-ci et accessible.

Câble secteur de pays autres que les Etats-Unis

L'équipement est livré avec un câble secteur au standard IEC, moulé mâle/femelle. Si vous souhaitez changer la prise mâle de votre cordon, voici les codes couleurs des fils :

- Le fil VERT/JAUNE est connecté à T (Terre)
- Le fil BLEU est connecté à N (Neutre)
- Le fil MARRON est connecté à P (Phase)



- Attention si l'appareil a 2 alimentations, s'assurer que les cordons soient branchés sur la même phase.

Explicación de los Símbolos de Seguridad

ESP

- Éste símbolo refiere al usuario información importante contenida en la literatura incluida. Referirse al manual.
- Éste símbolo indica que voltajes peligrosos están presentes en el interior. No hay elementos accesibles al usuario dentro. Esta unidad sólo debería ser tratada por personal cualificado.

Advertencias de Seguridad



Las instrucciones de servicio cuando sean dadas, son sólo para uso de personal cualificado. Para reducir el riesgo de choque eléctrico no llevar a cabo ninguna operación de servicio aparte de las contenidas en las instrucciones de operación, a menos que se esté cualificado para realizarlas. Referir todo el trabajo de servicio a personal cualificado.

- Para reducir el riesgo de choque eléctrico, no exponer este equipo a la lluvia o humedad.
- Siempre asegurarse de que la unidad está propiamente conectada a tierra y que las conexiones de alimentación están hechas correctamente.
- Este equipo debe ser alimentado desde un sistema de alimentación con conexión a TIERRA (⊕) y teniendo una conexión neutra fácilmente identificable.
- La toma de alimentación para la unidad debe ser cercana y fácilmente accesible.

Conexión de alimentación en otros países que no sean USA

El equipo es normalmente entregado con un cable de alimentación con un enchufe hembra estándar IEC en un extremo y con una clavija estándar IEC en el otro. Si se requiere eliminar la clavija para sustituirla por otra, disponer dicha clavija de una forma segura. El código de color a emplear es como sigue:

- VERDE/ AMARILLO conectado a E (Conductor de protección a Tierra -Earth en el original-)
- AZUL conectado a N (Conductor Neutro -Neutral en el original-)
- MARRÓN conectado a L (Conductor Fase -Live en el original-)



- Advertencia Si la unidad tuviera dos tomas de alimentación, asegurarse de que ambos cables de alimentación están conectados a la misma fase.

Simboli di sicurezza:



- ⚠ Questo simbolo indica l'informazione importante contenuta nei manuali appartenenti all'apparecchiatura. Consultare il manuale.
- ⚠ Questo simbolo indica che all'interno dell'apparato sono presenti tensioni pericolose. Non cercare di smontare l'unità. Per qualsiasi tipo di intervento rivolgersi al personale qualificato.

Attenzione:



Le istruzioni relative alla manutenzione sono ad uso esclusivo del personale qualificato. E' proibito all'utente eseguire qualsiasi operazione non esplicitamente consentita nelle istruzioni. Per qualsiasi informazione rivolgersi al personale qualificato.

- Per prevenire il pericolo di scosse elettriche è necessario non esporre mai l'apparecchiatura alla pioggia o a qualsiasi tipo di umidità.
- Assicurarsi sempre, che l'unità sia propriamente messa a terra e che le connessioni elettriche siano eseguite correttamente.
- Questo dispositivo deve essere collegato ad un impianto elettrico dotato di un sistema di messa a terra efficace.
- La presa di corrente deve essere vicina all'apparecchio e facilmente accessibile.

Connessione elettrica nei paesi diversi dagli Stati Uniti

L'apparecchiatura normalmente è spedita con cavo pressofuso con la presa e spina standard IEC. Nel caso della rimozione della spina elettrica, gettarla via immediatamente osservando tutte le precauzioni del caso. La leggenda dei cavi è la seguente:

VERDE/GIALLO cavo connesso ad "E" (terra)
 BLU cavo connesso ad "N" (neutro)
 MARRONE cavo connesso ad "L" (fase)



- ⚠ Attenzione! Nel caso in cui l'apparecchio abbia due prese di corrente, assicurarsi che i cavi non siano collegati a fasi diverse della rete elettrica.

Förklaring av Säkerhetssymboler



- ⚠ Denna symbol hänvisar användaren till viktig information som återfinns i litteraturen som medföljer. Se manualen.
- ⚠ Denna symbol indikerar att livsfarlig spänning finns på insidan. Det finns inga servicevänliga delar inne i apparaten. Denna apparat får endast repareras av utbildad personal.

Säkerhetsvarningar



Serviceinstruktioner som anges avser endast kvalificerad och utbildad servicepersonal. För att minska risken för elektrisk stöt, utför ingen annan service än den som återfinns i medföljande driftinstruktionerna, om du ej är behörig. Överlåt all service till kvalificerad personal.

- För att reducera risken för elektrisk stöt, utsätt inte apparaten för regn eller fukt.
- Se alltid till att apparaten är ordentligt jordad samt att strömtillförseln är korrekt utförd.
- Denna apparat måste bli försörd från ett strömsystem som är försedd med jordadanslutning (⊕) samt ha en neutral anslutning som lätt identifierbar.
- Vägguttaget som strömförsörjer apparaten bör finnas i närheten samt vara lättillgänglig.

Strömkontakter i länder utanför USA

Apparaten utrustas normalt med en strömkabel med standard IEC gjuten honkontakt på ena änden samt en standard IEC gjuten hankontakt på den andra änden. Om man måste avlägsna den gjutna hankontakten, avyttra denna kontakt omedelbart på ett säkert sätt. Färgkoden för ledningen är följande:

GRÖN/GUL ledning ansluten till E (Skyddsjordad ledare)
 BLÅ ledning ansluten till N (Neutral ledare)
 BRUN ledning ansluten till L (Fas ledare)



- ⚠ Varning! Om enheten har två huvudsakliga elförsörjningar, säkerställ att båda strömkablarna som är inkopplade i enheten arbetar från samma fas.

Forklaring på sikkerhedssymboler



- ⚠ Dette symbol gør brugeren opmærksom på vigtig information i den medfølgende manual.
- ⚠ Dette symbol indikerer farlig spænding inden i apparatet. Ingen bruger servicebare dele i apparatet på brugerniveau. Dette apparat må kun serviceres af faglærte personer..

Sikkerhedsadvarsler



Serviceinstruktioner er kun til brug for faglærte servicefolk. For at reducere risikoen for elektrisk stød må bruger kun udføre anvisninger i betjeningsmanualen. Al service skal udføres af faglærte personer.

- For at reducere risikoen for elektrisk stød må apparatet ikke udsættes for regn eller fugt.
- Sørg altid for at apparatet er korrekt tilsluttet og jordat.
- Dette apparat skal forbindes til en nettilslutning, der yder BESKYTTENDE JORD (⊕) og 0 forbindelse skal være tydeligt markeret.
- Stikkontakten, som forsyner apparatet, skal være tæt på apparatet og let tilgængelig.

Nettilslutning i andre lande end USA

Udstyret leveres normalt med et strømkabel med et standard IEC støbt løst hunstik i den ene ende og et standard IEC støbt hanstik i den anden ende. Hvis et af de støbte stik på strømkablet er defekt, skal det straks kasseres på forsvarlig vis. Farvekoden for lederen er som følger:

GRØN/GUL leder forbundet til J (Jord)
 BLÅ leder forbundet til 0
 BRUN leder forbundet til F (Fase)



- ⚠ Forsigtig Hvis enheden har to lysnetindgange, skal der sørges for at begge ledninger tilsluttes lysnetudgange fra den samme fase.

Turvamerkkien selitys



- ⚠ Tämä merkki tarkoittaa, että laitteen mukana toimitettu kirjallinen materiaali sisältää tärkeitä tietoja. Lue käyttöohje.
- ⚠ Tämä merkki ilmoittaa, että laitteen sisällä on vaarallisen voimakas jännite. Sisäpuolella ei ole mitään osia, joita käyttäjä voisi itse huoltaa. Huollon saa suorittaa vain alan ammattilainen.

Turvaohjeita



Huolto-ohjeet on tarkoitettu ainoastaan alan ammattilaisille. Älä suorita laitteelle muita toimenpiteitä, kuin mitä käyttöohjeissa on neuvottu, ellei ole asiantuntija. Voit saada sähköiskun. Jätä kaikki huoltotoimet ammattilaiselle.

- Sähköiskujen välttämiseksi suojaa laite sateelta ja kosteudelta.
- Varmistu, että laite on asianmukaisesti maadoitettu ja että sähkökytkennät on tehty oikein.
- Laitteelle tehoa syöttävässä järjestelmässä tulee olla SUOJAMAALITÄNTÄ (⊕) ja nolaliitännän on oltava luotettavasti tunnistettavissa.
- Sähköpistorasian tulee olla laitteen lähellä ja helposti tavoitettavissa.

Sähkökytkentä

Laitteen vakiovarusteena on sähköjohto, jonka toisessa päässä on muottiin valettu, IEC-standardin mukainen liitäntärasia ja toisessa päässä muottiin valettu, IEC-standardin mukainen pistoliitin. Jos pistoliitin tarvitsee poistaa, se tulee hävittää heti turvallisella tavalla. Johtimet kytketään seuraavasti:

KELTA-VIHREÄ suojamaajohdin E-napaan
 SININEN nolajohdin N-napaan
 RUSKEA vaihejohdin L-napaan



- ⚠ Huom! Jos laitteessa on kaksi verkkojännitteen tuloliitäntää, niiden johdot on liitettävä verkkopistorasioihin, joissa on sama vaiheistus.

Σύμβολο de Segurança



- O símbolo triangular adverte para a necessidade de consultar o manual antes de utilizar o equipamento ou efectuar qualquer ajuste.
- Este símbolo indica a presença de voltagens perigosas no interior do equipamento. As peças ou partes existentes no interior do equipamento não necessitam de intervenção, manutenção ou manuseamento por parte do utilizador. Reparações ou outras intervenções devem ser efectuadas apenas por técnicos devidamente habilitados.

Avisos de Segurança

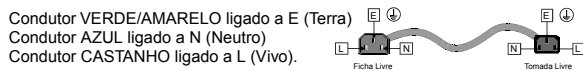


As instruções de manutenção fornecidas são para utilização de técnicos qualificados. Para reduzir o risco de choque eléctrico, não devem ser realizadas intervenções no equipamento não especificadas no manual de instalações a menos que seja efectuadas por técnicos habilitados.

- Para reduzir o risco de choque eléctrico, não expor este equipamento à chuva ou humidade.
- Assegurar que a unidade está sempre devidamente ligada à terra e que as ligações à alimentação estão correctas.
- O sistema de alimentação do equipamento deve, por razões de segurança, possuir ligação a terra de protecção (⊥) e ligação ao NEUTRO devidamente identificada.
- A tomada de energia à qual a unidade está ligada deve situar-se na sua proximidade e facilmente acessível.

Ligação da alimentação noutros países que não os EUA

O equipamento é, normalmente, enviado com cabo de alimentação com ficha IEC fêmea standard num extremo e uma ficha IEC macho standard no extremo oposto. Se for necessário substituir ou alterar alguma destas fichas, deverá remove-la e elimina-la imediatamente de maneira segura. O código de cor para os condutores é o seguinte:



- Atenção: Se a unidade tem duas fontes de alimentação assegurar que os dois cabos de alimentação estão ligados a tomadas pertencentes à mesma fase.

Επεξήγηση των Συμβόλων Ασφαλείας



Αυτό το σύμβολο παραπέμπει το χρήστη σε σημαντικές πληροφορίες που συμπεριλαμβάνονται στο συνοδευτικό εγχειρίδιο.



Αυτό το σύμβολο υποδεικνύει ότι στο εσωτερικό υφίστανται επικίνδυνες ηλεκτρικές τάσεις. Στο εσωτερικό δεν υπάρχουν επισκευάσιμα μέρη. Αυτή η μονάδα πρέπει να επισκευάζεται μόνο από ειδικά εκπαιδευμένο προσωπικό.

Προειδοποίηση Ασφαλείας

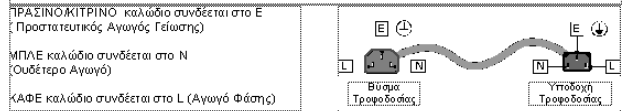


Οδηγίες επισκευής, όπου παρέχονται, αναφέρονται αποκλειστικά και μόνο σε εξειδικευμένο προσωπικό. Για να μειωθεί ο κίνδυνος ηλεκτροπληξίας, μην εκτελέτε επισκευές παρά μόνο τις συμπεριλαμβανόμενες στο εγχειρίδιο των οδηγιών, εκτός και αν έχετε τα απαραίτητα προσόντα για να το κάνετε. Όλες οι επισκευές να εκτελούνται από ειδικά εκπαιδευμένο προσωπικό.

- Για να μειώσετε τον κίνδυνο ηλεκτροπληξίας μην εκθέτετε τη συσκευή σε βροχή ή υγρασία.
- Πάντα να εξασφαλίζετε τη σωστή γείωση της συσκευής και τη σωστή σύνδεση των συνδέσμων τροφοδοσίας.
- Ο εξοπλισμός πρέπει να τροφοδοτείται από ένα σύστημα τροφοδοσίας που να εξασφαλίζει ΠΡΟΣΤΑΤΕΥΤΙΚΗ ΓΕΙΩΣΗ (⊥) και να έχει καθορισμένες θέσεις ουδέτερου και φάσης.
- Ο εξοπλισμός που τροφοδοτεί τη συσκευή θα πρέπει να βρίσκεται κοντά στη συσκευή και να είναι εύκολα προσβάσιμος.

Σύνδεση τροφοδοσίας σε χώρες εκτός των ΗΠΑ

Ο εξοπλισμός συνοδεύεται συνήθως από ένα καλώδιο τροφοδοσίας με ένα σταθερό βύσμα τροφοδοσίας βρέματος τύπου πυραμίδας στη μια άκρη του και μια σταθερή υποδοχή τροφοδοσίας βρέματος τύπου πυραμίδας στην άλλη άκρη του. Εάν χρειαστεί να αφαιρέσετε το σταθερό βύσμα τροφοδοσίας μην το επαναχρησιμοποιείτε, θεωρείται άχρηστο. Ο χρωματικός οδηγός για το καλώδιο τροφοδοσίας είναι ο παρακάτω:



- ΠΡΟΣΟΧΗ! Αν η μονάδα έχει δύο τροφοδοτικά βεβαιωθείτε ότι και τα δύο καλώδια τροφοδοσίας είναι συνδεδεμένα σε εξόδους τροφοδοσίας που βρίσκονται στην ίδια φάση.

Laser Safety

This product operates with Class 1 laser products.



Caution: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Ventilation

Although the unit is constructed to meet normal environmental requirements, ensure that there is a free flow of air at the front, rear, and sides of the unit to dissipate the heat produced during operation. Installations should be designed to allow for this.



Do not obstruct the ventilation holes on the right-side of the unit. Damage to the equipment may result.

Safety Standards

This equipment conforms to the following standards:

EN60950-1 2006 + A11: 2009

Safety of Information Technology Equipment Including Electrical Business Equipment.

UL1419 (3rd Edition) - UL File E193966

Standard for Safety – Professional Video and Audio equipment.



EMC Standards

This equipment conforms to the following standards:

EN 55032:2012 (Class A)

Electromagnetic Compatibility of Multimedia Equipment - Emission Requirements.

EN 61000-3-2:2014 (Class A)

Limits for Harmonic Current Emissions.

EN 61000-3-3:2013

Limitation of Voltage Changes, Voltage Fluctuations and Flicker in Public Low-Voltage Supply Systems.

FCC/CFR 47:Part 15, Class A

Federal Communications Commission Rules Part 15, Subpart B, Class A.

EMC Environment

The product(s) described in this manual conform to the EMC requirements for, and are intended for use in, the controlled EMC environment (for example, purpose-built broadcasting or recording studios), and the rural outdoor environment (far away from railways, transmitters, overhead power lines, etc.) E4.



Warning: This equipment is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.

EMC Performance of Cables and Connectors

SAM products are designed to meet or exceed the requirements of the appropriate European EMC standards. In order to achieve this performance in real installations it is essential to use cables and connectors with good EMC characteristics.

All signal connections (including remote control connections) shall be made with screened cables terminated in connectors having a metal shell. The cable screen shall have a large-area contact with the metal shell.

Coaxial Cables

Coaxial cables connections (particularly serial digital video connections) shall be made with high-quality double-screened coaxial cables such as Belden 1694 or BBC type PSF1/2M.

D-type Connectors

D-type connectors shall have metal shells making good RF contact with the cable screen. Connectors having indents which improve the contact between the plug and socket shells are recommended.

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1. Introduction

1.1 Description

The IQCAG00 enables out-of-band remote control of IQ IP interfacing and processing modules, via dual RJ45 1GbE links.

Using the internal communications bus within IQ frames, the IQCAG00 allows any IP modules installed in the frame to communicate via dual redundant 1GbE links separate to the IP video transport. This is ideal for networks where independent video and data transport has been mandated, and the dual 1GbE links also provide additional redundancy for control layers. IP modules can also communicate in-band, providing further control flexibility.

IQCAG00 fully integrates with SAM’s RollCall control and monitoring system, including its broadcast-centric IP routing and network management solution, designed to migrate broadcasters from a traditional baseband routing and control environment to new Hybrid SDI/IP work flows.

1.2 Feature Summary

- Dual 1GbE Ethernet links for remote control interfacing out-of-band.
- Aggregates control for any IP interfacing or processing modules in the same enclosure.
- RollCall and IP routing control and monitoring compatible, with standard logging and reporting features.
- Provides independent control links with built in redundancy.
- Useful for applications requiring control flexibility both in and out of band.

1.3 Application Notes

1.3.1 About Power Ratings

SAM IQ modules are assigned a *Power Rating* (PR). This figure represents the relative power consumption of a module.

SAM modular enclosures are also assigned PR values. This figure represents the maximum power available from the enclosure.

The combined total of all modules’ PR values must not exceed the enclosure’s PR value.

Note: If a module’s PR value is not known, use the module’s power consumption figure in watts as the PR value.

1.3.2 Power Ratings and Card Widths

Product	Width	PR
IQCAG00	1	4.5

1.4 Block Diagram

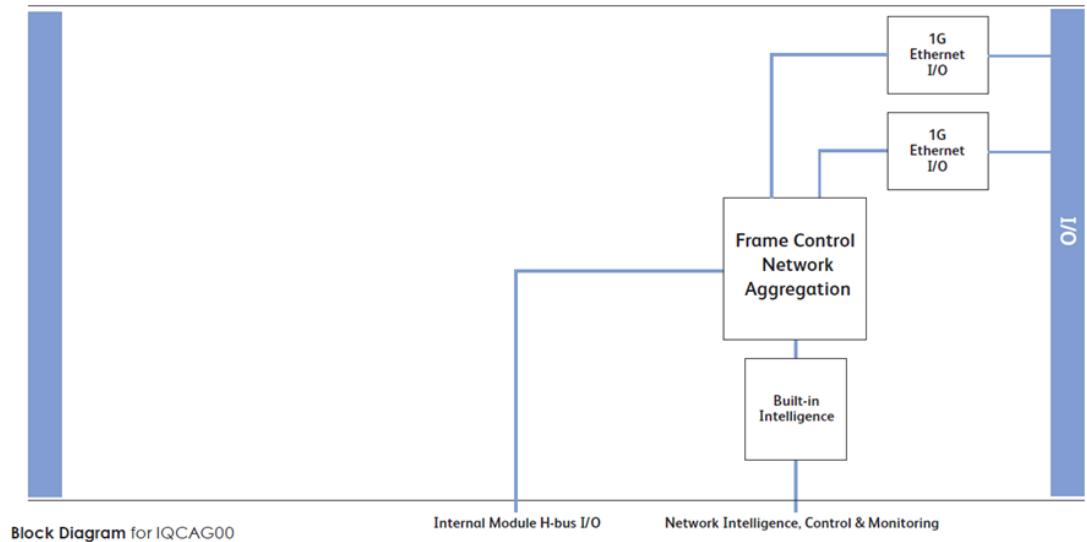


Figure 1 IQCAG00 Block Diagram

1.5 Order Codes

1.5.1 Enclosure and IP Interface Options

The following product order codes are covered by this manual:

IQCAG0000-1B IP Control Aggregation Gateway. 2 x 1G Ethernet I/O via RJ45 connectors.

1.6 Rear Panel

The following rear panel types are available:.

1.6.1 IQCAG0000-1B



Figure 2 IQCAG0000-1B

1.7 Enclosures

The IQCAG00 is suitable for fitment to the enclosures shown below.

Important: Although IQ modules are interchangeable between enclosures, their rear panels are enclosure-specific. An IQH3B enclosure accepts modules with either “A” or “B” order codes. An IQH3A or IQH1A enclosure accepts modules with “A” order codes only.

1.7.1 IQH3B-S-0, IQH3B-S-P



Figure 3 IQH3B-S-0, IQH3B-S-P

Note: The IQH3B enclosure provides two internal analog reference inputs. These inputs are applicable to modules with “B” order codes only.

1.7.2 IQH4B-S-P



Figure 4 IQH4B-S-P

2. Technical Specification

Inputs/Outputs

Ethernet

Connector/Format	1GbE/RJ45
------------------	-----------

Conforms to	1GbE
-------------	------

RollCall Features

Status	Ethernet statistics
--------	---------------------

User Memories	None
---------------	------

Logging	Yes
---------	-----

RollTrack Controls	Yes
--------------------	-----

Setup	Product details, code versions, restart
-------	---

Specifications

Electrical	IEEE802.3
------------	-----------

Connector/Format	RJ45
------------------	------

Start-up Time	30 sec
---------------	--------

Power Consumption

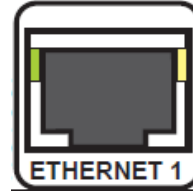
Module Power Consumption	4.5 PR
--------------------------	--------

3. Connections

This section describes the physical input and output connections provided by the IQCAG00.

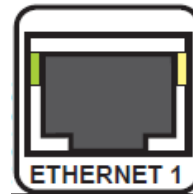
3.1 1GbE Ethernet RJ45

RJ45 supporting 1GbE Ethernet.




3.2 1GbE Ethernet RJ45

RJ45 supporting 1GbE Ethernet.




4. Card Edge LEDs

The LEDs on the edge of the module indicate its operating status.

Front Panel	Description	
	● BOARD	Not Used
	● STATUS	Green Flashing = OK

5. RollCall Control Panel

This section contains information on using the IQCAG with RollCall.

For help with general use of the RollCall application, open the user manual by clicking the  button on the main RollCall toolbar.

5.1 Navigating Pages in the RollCall Template

The RollCall template has a number of pages, each of which can be selected from the list at the top left of the display area. Right-clicking anywhere on the pages will also open a page view list, allowing quick access to any of the pages.

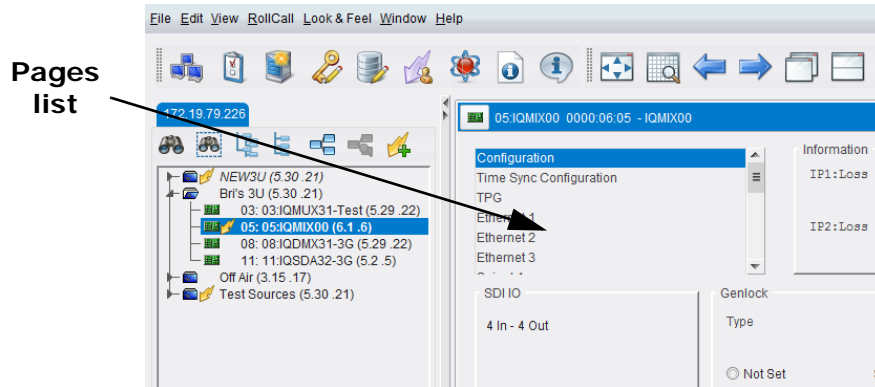


Figure 5 Template Pages


5.1.1 Template Pages


The following pages are available:

- **Ethernet Router** - see section 5.3
- **Logging** - see section 5.4.
- **RollTrack** - see section 5.5.
- **Setup** - see section 5.6.

5.1.2 Setting Values

Many of the settings within the templates have values, either alpha or numeric.

When setting a value in a field, the value, whether text or a number, must be set by pressing the ENTER key, or clicking the  **Save Value** button.

Clicking an associated  **Preset Value** button returns the value to the factory default setting.

5.2 Information Display

The **Information** display pane appears at the top of each page, and shows basic IP interface information.

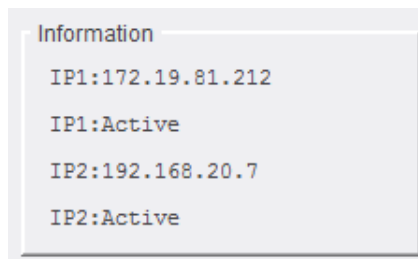


Figure 6 Information Pane

5.3 Ethernet Router

The **Ethernet Router** page allows IP settings to be configured, and displays current IP connection status.

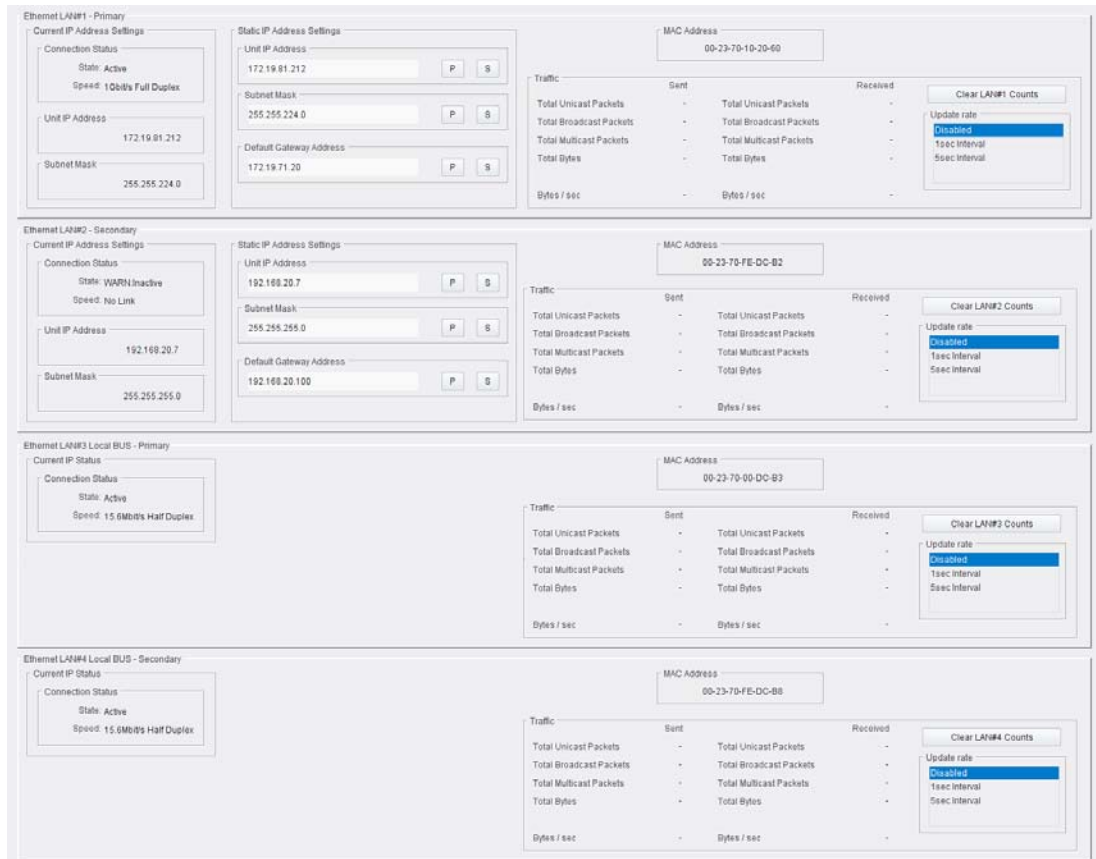


Figure 7 Ethernet Router Page

Note: Consult your network administrator for the correct settings for this page. The module must be restarted in order for the IP settings to take effect; see section 5.6.

Note: The IQCAG00 operates as a Layer 2 IP Bridge. The A and B networks should be configured as separately identified networks, for example 192.168.2.0/24 and 192.168.3.0/24. The IQCAG00's IP addresses should be configured inside the two separate network blocks, and all IQ cards that use this control system should also comply with the same rules.

The page is divided into 4 sections:

- Ethernet LAN#1 - Primary
- Ethernet LAN#2 - Secondary
- Ethernet LAN#3 Local BUS - Primary
- Ethernet LAN#4 Local BUS - Secondary

Ethernet LAN#1 and LAN#2 refer to the two Ethernet ports on the module rear panel; primary and secondary interfaces provide redundancy. Similarly, Ethernet LAN#3 and LAN#4 are primary and secondary interfaces to the enclosure's internal bus.

Each of these sections provide connection status and traffic information. Ethernet LAN#1 and LAN#2 sections also provide IP configuration settings.

5.3.1 IP Address Settings

Enter suitable **Unit IP Address**, **Subnet Mask** and **Default Gateway Address** values, and click **S** to save. If necessary, saved settings may be recalled later by clicking **P**.

Your network administrator should be able to provide IP configuration information.

When complete, restart the module by clicking **Restart** on the **Setup** page (see section 5.6).

5.3.2 Traffic Statistics

Information on traffic sent or received via each interface is displayed to the right of the page. Select an **Update Rate** as required. Values can be cleared down by clicking **Clear LAN#n Counts**.

5.4 Logging

5.4.1 Logging - Misc

The **Logging - Misc** page displays current unit and status information. This can be recorded by a suitable logging device attached to the RollCall network.

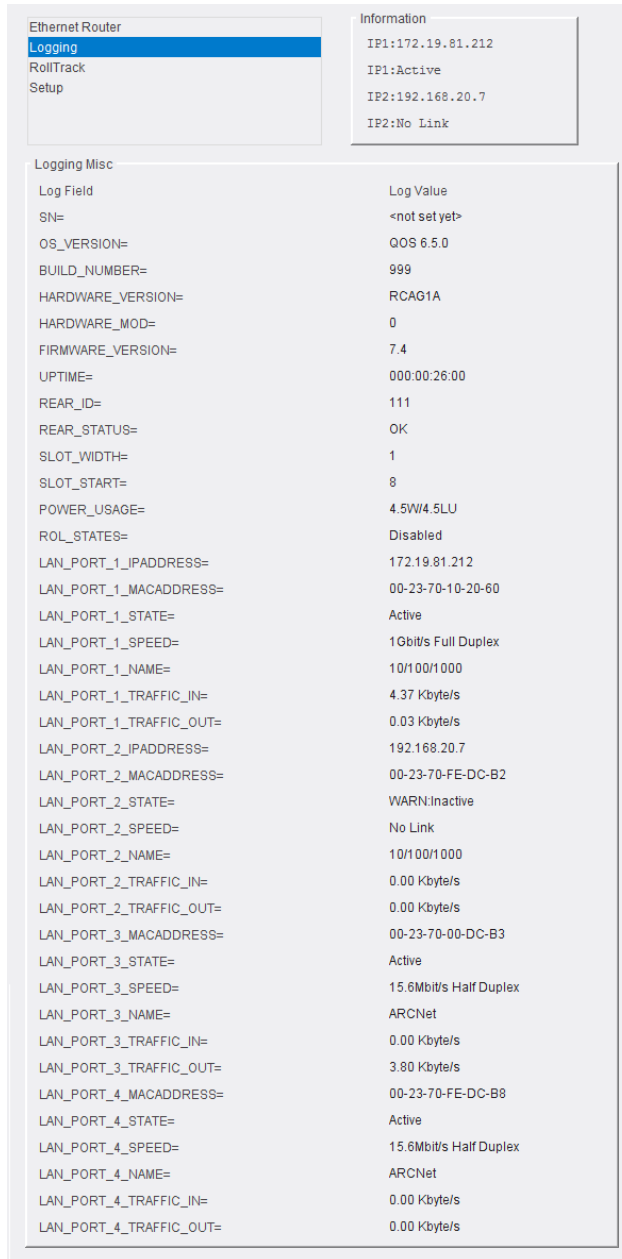


Figure 8 Logging Page

The following options are available:

Log Field	Description
SN=	Displays the module serial number, which consists of an S followed by eight digits.
OS_VERSION=	Displays the operating system name and version.
BUILD_NUMBER=	Displays the build number.
HARDWARE_VERSION=	Displays the hardware version number.
HARDWARE_MOD=	Displays the hardware modification number.

Log Field	Description
FIRMWARE_VERSION=	Displays the firmware version number.
UPTIME=	Displays the time since the last restart in the format ddd:hh:mm:ss.
REAR_ID=	Displays the code number of the rear fitted
REAR_STATUS=	Displays the status of the rear where it can be determined
SLOT_WIDTH=	Displays the slot width. IQMBG80 units are available in single and double width
SLOT_START=	Displays the slot in the rack where IQMBG80 is located
POWER_USAGE=	Displays the power usage in: Watts (A type rack) or Load Units (B type rack). Note: this not a live power reading, it is a maximum power rating
ROL_STATES=	Displays the RollCall status. Valid values are: <ul style="list-style-type: none"> • OK • FAIL:n - where n is the RollTrack index (or indices) which are failing • Disabled
LAN_PORT_N_IPADDRESS=	Displays the unit IP address.
LAN_PORT_N_MACADDRESS=	Displays the unit MAC address.
LAN_PORT_N_STATE=	Displays the LAN port state. Valid values are: <ul style="list-style-type: none"> • Active • Inactive
LAN_PORT_1_SPEED=	Displays unit LAN Speed. For example: 1Gbit/s Full Duplex
LAN_PORT_1_NAME=	Displays the unit LAN port name. For example: 10/100/1000
LAN_PORT_N_TRAFFIC_IN=	Displays data rate in Kbps of data received via this port.
LAN_PORT_N_TRAFFIC_OUT=	Displays data rate in Kbps of data transmitted via this port.

Where N is the input number

5.5 RollTrack

The **RollTrack** page enables information to be sent, via the RollCall network, to other compatible units on the same network.

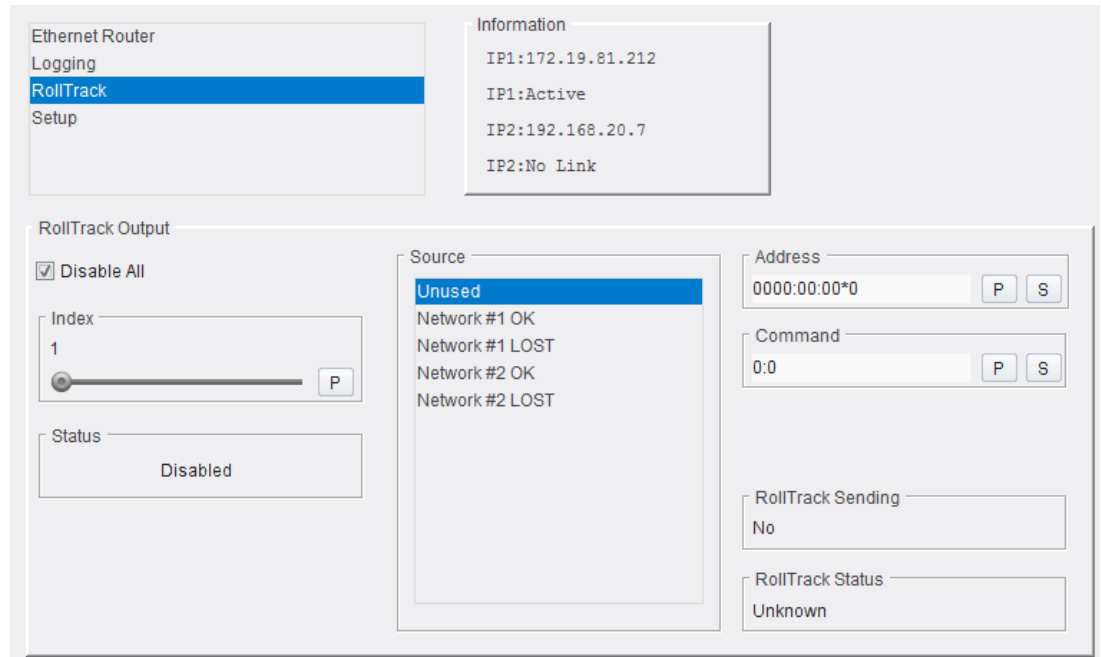


Figure 9 RollTrack Page

The following options are available:

Option	Operation
Disable All	Check to disable all RollTrack items.
Index	Allows up to 16 distinct RollTrack outputs to be set up. Dragging the slider selects the RollTrack Index number, the Status field below the slider. Click P to select the default preset value. When no source is selected, Unused is displayed in the Source pane.
Status	Displays the RollTrack index number set by the slider.
Source	The source of information that triggers transmission of data is selected with this control. Dragging the slider selects the RollTrack source, displayed below the slider. Clicking P selects the default preset value. When no source is selected, Unused is displayed.

Option	Operation
Address	<p>Allows the RollTrack address of the selected destination unit to be specified.</p> <p>The address may be changed by typing the new destination in the text area and then clicking S to save. Click P to return to the default preset destination.</p> <p>A RollTrack address consists of four sets of numbers, such as 0000:10:01*99.</p> <ul style="list-style-type: none"> • The first set, 0000, is the network segment code number. • The second set, 10, is the number identifying the enclosure/mainframe. • The third set, 01, is the slot number in the enclosure/mainframe. • The fourth set, 99, is a user-definable number that is a unique ID for the destination unit in a multi-unit system. This ensures that only the correct unit will respond to the command. If left at 00, an incorrectly fitted unit may respond inappropriately.
Command	<p>This enables a command to be sent to the selected destination unit.</p> <p>The command may be changed by typing a code in the text area and then clicking S to save. Clicking P selects the default preset command.</p> <p>The RollTrack command consists of two sets of numbers, for example: 84:156.</p> <p>The first number, 84, is the actual RollTrack command.</p> <p>The second number, 156, is the value sent with the command.</p>
RollTrack Sending	<p>A message is displayed here when the unit is actively sending a RollTrack command. Possible messages are:</p> <ul style="list-style-type: none"> • No - No message is being sent. • Yes - A message is being sent.
RollTrack Status	<p>Displays the status of the currently selected RollTrack index. Possible status messages are:</p> <ul style="list-style-type: none"> • OK - RollTrack message sent and received OK. • Unknown - RollTrack message has been sent but has not yet completed. • Timeout - RollTrack message sent but acknowledgement not received. This may be because the destination unit is not at the location specified. • Bad - RollTrack message has not been correctly acknowledged at the destination unit. This may be because the destination unit is not of the type specified. • Disabled - RollTrack sending is disabled.

5.6 Setup

The **Setup** page displays basic information about the module, such as the serial number and software versions. Use the functions on the screen to restart the module or return all settings to their factory or default settings.

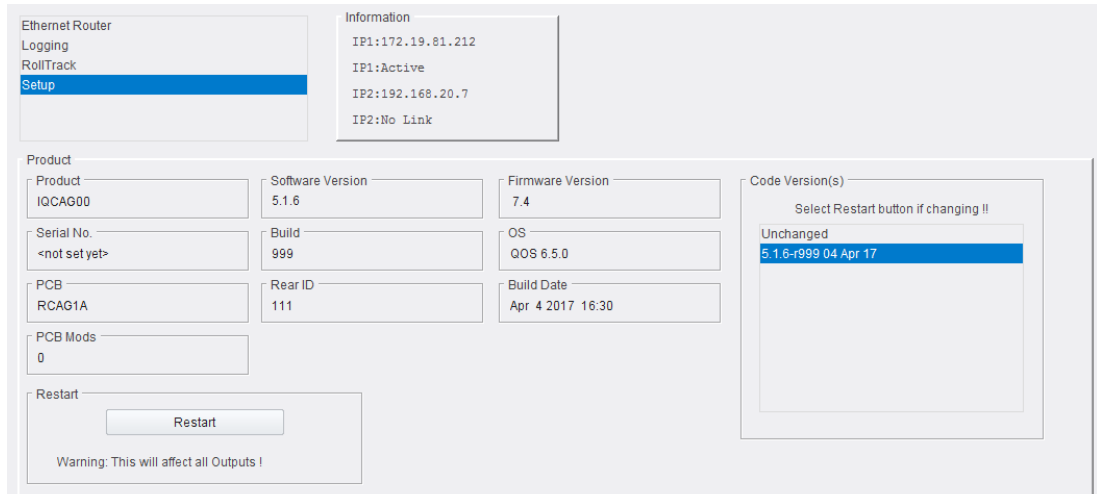


Figure 10 Setup Page

The following information is available:

- **Product** - Name of the module.
- **Software Version** - Currently installed software version number.
- **Firmware Version** - Currently installed firmware version number.
- **Serial No** - Module serial number.
- **Build** - Factory build number. This number identifies all module parameters.
- **OS** - Operating system version number.
- **PCB** - Printed circuit board revision number.
- **Rear ID** - Rear panel type.
- **Build Date** - Date the module was made.

5.6.1 Code Versions

Allows previously installed upgrades to be set as the active code; select the relevant entry from the list, then click **Restart** to apply it.

Refer to the RollCall user documentation for information on installing upgrades.

5.6.2 Restart

Click to power the module down and back up again.