

IQH3A 3U Enclosure

V3 Gateway Upgrade

IQ Modular Enclosure

Operator's Manual

© January 2006

www.snellwilcox.com

Snell & Wilcox Ltd., Southleigh Park House, Eastleigh Road, Havant, Hants, PO9 2PE, United Kingdom.

For technical assistance contact: Tel: +44 (0)23 9248 9000 Fax: +44 (0)23 9245 1411

For general and sales assistance contact: Tel: +44 (0)20 8917 4300 Fax: +44 (0)20 8607 9466

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



Servicing instructions where given, are for use by qualified service 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)

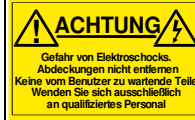


- Caution If the unit has two mains supply inputs ensure that both power cords are plugged into mains outlets operating from the same phase.

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



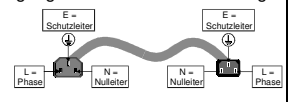
Die angeführten Service-/Reparatur-Anweisungen sind ausschließlich von qualifiziertem Service-Personal auszuführen. Um das Risiko eines lektroschocks zu reduzieren, führen Sie ausschließlich die im Benutzerhandbuch eschriebenen Anweisungen aus, es sei denn, Sie haben die entsprechende Qualifikation. 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 Nulleiter 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 = Nulleiter
- 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 :



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:

I

- ⚠ 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. È 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.

Forklaring på sikkerhedssymboler

DK

- ⚠ 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 jordet.
- 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 ledningen 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.

Förklaring av Säkerhetssymboler

S

- ⚠ 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 få 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 strömssystem som är försedd med jordanslutning (⊕) samt ha en neutral anslutning som lätt identifierbar.
- Väggtaget 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.

Turvamerkkien selitys

FI

- ⚠ 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 SUOJAMAALIITÄNTÄ (⊕) ja nolliitännän 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 nollijohtin N-napaan
RUSKEA vaihejohtin L-napaan



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

Símbolos de Segurança (P)

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

PERIGO

RISCO DE CHOQUE ELÉCTRICO!
NÃO RETIRAR AS PROTECÇÕES
PARTES QUE NÃO REQUEREM
INTERVENÇÃO DO UTILIZADOR!
CONTACTAR UM TÉCNICO
DEVIDAMENTE HABILITADO!

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:

Conductor VERDE/AMARELO ligado a E (Terra)
Conductor AZUL ligado a N (Neutro)
Conductor CASTANHO ligado a L (Vivo).

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 (G)

Αυτό το σύμβολο παραπέμπει τη χρήση 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

CAUTION

⚠ Οδηγίες επισκευής, όπου παρέχονται, αναφέρονται αποκλειστικά και μόνο σε εξειδικευμένο προσωπικό. Για να μειωθεί ο κίνδυνος ηλεκτροπληξίας, μην εκτελείτε 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 ρεύματος τύπου πυραμίδας στη μια άκρη του και μια σταθερή υποδοχή τροφοδοσίας ρεύματος 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:

ΠΡΑΣΙΝΟ/ΚΙΤΡΙΝΟ καλώδιο συνδέεται στο E (Προστατευτικός Αγωγός Γείωσης)

ΜΠΛΕ καλώδιο συνδέεται στο N (Ουδέτερο Αγωγό)

ΚΑΦΕ καλώδιο συνδέεται στο L (Αγωγό Φάσης)

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

Products employing Lithium batteries

CAUTION

This equipment contains a lithium battery.

There is a danger of explosion if this is replaced incorrectly.

Replace only with the same or equivalent type.

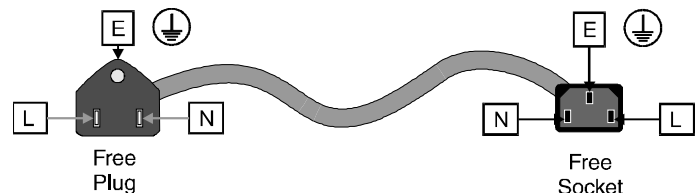
Dispose of used batteries according to the instructions of the manufacturer.

Batteries **shall only** be replaced by trained service technicians.

Power cable supplied for the USA

The equipment is shipped with a power cord with a standard IEC molded free socket on one end and a standard 3-pin plug on the other. If you are required to remove the molded mains supply plug, dispose of the plug immediately in a safe manner. The color code for the cord is as follows:

- GREEN** lead connected to E (Protective Earth Conductor)
- BLACK** lead connected to L (Live Conductor)
- WHITE** lead connected to N (Neutral Conductor)



For products with more than one power supply inlet

Caution: To reduce the risk of electric shock plug each power supply cord into separate branch circuits employing separate service grounds.

Rack Mounting the Enclosure



This product must not be rack mounted using only the front rack ears.



When rack-mounting the product, one of the following methods of installation must be used: -

- Place the unit on a suitably specified, and installed rack shelf and secure the product to the rack via the front rack ears or,
 - Fit the unit using the rear rack mount kit available from Snell & Wilcox by quoting the order code FGACK RACK-MNT-KIT.
-

Safety Standards

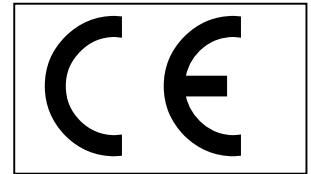
The IQH3A Enclosure conforms to the following standards:

EN60950: 2000

Safety of Information Technology Equipment.

cULus Listed

Professional Video Equipment File No. E193966



Laser Safety

EN60825-1 (2001)

Safety of Laser products.

This label will be fitted in products indicating the Laser source.



Caution – use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. Viewing the laser diode with the optical fiber removed and with the aid of optical magnifiers may be hazardous. The IQ fiber module is a Class 1 laser product (output power <15mW) at 1310nm with a beam divergence >30mrad. The laser diode used is class 1M (output power <30mW).

EMC Standards

This unit conforms to the following standards:

BS EN 55103-1 : 1997

Electromagnetic Compatibility, Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use. Part 1. Emission

BS EN 55103-2 : 1997

Electromagnetic Compatibility, Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use. Part 2. Immunity

Federal Communications Commission Rules Part 15, Class A :1998

EMC Environment

The product(s) described in this manual conform to the EMC requirements for, and are intended for use in, *either*

The commercial and light industrial environment (including, for example, theatres) E2

or

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

The applicable environment is stated in the Technical Profile section of the product operation manual under “EMC Performance Information/Environment.”

EMC Performance Information

Please refer to the *Technical Profile/Specifications* section of the product operation manual.

EMC Performance of Cables and Connectors

Snell & Wilcox 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 "dimples" which improve the contact between the plug and socket shells, are recommended.

About this Manual

This manual contains information for the operation of the IQH3A Enclosure.

Update/revision sheets should replace existing pages when supplied by the agent or Snell & Wilcox Ltd.

Note that the date at the bottom of the page is the release date of the current revision.

This manual covers the following product:

- IQH3A Enclosure - 3U modular enclosure with V3 Gateway Card Upgrade

Packing List

The unit is supplied in a dedicated packing carton provided by the manufacturer and should not be accepted if delivered in inferior or unauthorized materials. Carefully unpack the carton and check for any shipping damage or shortages.

Any shortages or damage should be reported to the supplier immediately.

Enclosures:

- IQH3A Enclosure
- Power cable
- Installation Manual
- Operation Manual

Software Version Amendments

Notes about Versions FittedThis unit is fitted with version 3.2. .11

Manufacturers Notice

Copyright protection claimed includes all forms and matters of copyrightable material and information now allowed by statutory or judicial law or hereinafter granted, including without limitation, material generated from the software programs which are displayed on the screen such as icons, screen display looks etc.

Reproduction or disassembly of embedded computer programs or algorithms prohibited.

Copyrighted names: Microsoft Windows™

Information in this manual and software are subject to change without notice and does not represent a commitment on the part of Snell & Wilcox Ltd. The software described in this manual is furnished under a licence agreement and may not be reproduced or copied in any manner without prior agreement with Snell & Wilcox Ltd. or their authorised agents.

No part of this publication may be transmitted or reproduced in any form or by any means, electronic or mechanical, including photocopy, recording or any information storage and retrieval system, without permission being granted, in writing, by the publishers or their authorised agents.

Important Notice

No responsibility is taken by the manufacturer or supplier for any non-compliance to EMC standards due to incorrect installation.

Table of Contents

SECTION

1	Description	
2	Specifications	
3	Operation	
	Control Panels	3.1
	The RollCall Communications System and Computer Control System ...	3.1
	RollCall Network System Details	3.2
	Ethernet	3.5
	Configuring IP Parameters	3.6
	SNMP (Simple Network Management Protocol)	3.7
	RollCall PC Control Panel Screens for the IQH3UM Enclosure	3.8
	Control (1-8) and (9-16)	3.8
	Slots (1-8) and (9-16)	3.10
	Setup	3.12
	Ethernet	3.15
	RollCall IP	3.15
	RollCall	3.17
	SNMP (Simple Network Management Protocol)	3.19
	Log Server	3.21
	Logging 1	3.22
	Logging 2	3.23
	Statistics	3.24
	Menu System Diagrams	3.25

Manual Revision Record

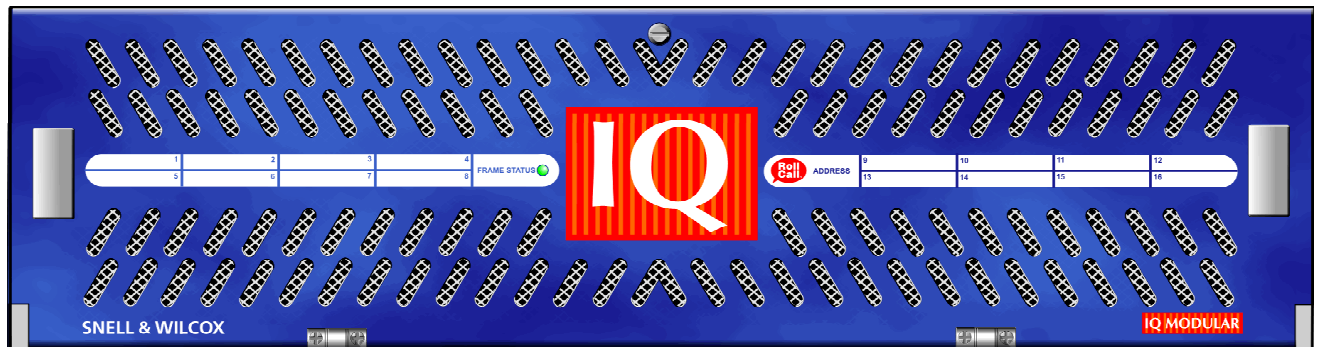
Date	Version No.	Issue No.	Change	Comments
18-Jan-06	1	1		For units with upgraded Gateway card

Description

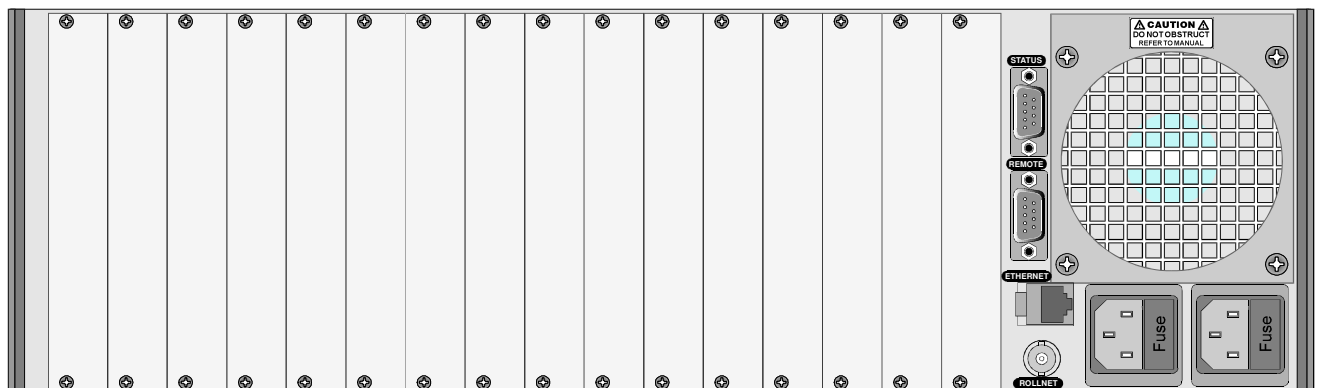
IQH3 enclosures offer industry leading, high-density delivery of modular solutions. The 3U rack unit accepts up to 16 modules. Single and dual PSU versions are available. The enclosures are

fitted with RollCall control and monitoring as standard and includes full SNMP control and monitoring functionality over Ethernet.

Front Panel View



Rear of Mainframe



Features

- 16 single or 8 double width modules (or any combination)
- Hot swappable redundant power supplies
- Full SNMP Control & Monitoring of IQ modular cards via Ethernet connection
- Plug-in gateway communications card to enable RollCall via RollNet, RS422 and RollCall over TCP/IP control
- Maximize availability through card edge restoration of module on-air configurations via card edge controls or remote application
- Optimum use of rack space – frames do not require any additional ventilation spacing
- In-service removable fan
- Variable fan speed, dependent upon load and ambient temperature
- Full chassis monitoring, including Inlet and Outlet temperature, fan condition and module status
- Full CE and UL compliance

Technical Profile

Features

Inputs/Outputs

RollCall Remote ControlBNC connector
RS422/485 Remote Control
9-pin D-type connector
RollCall/SNMP over TCP/IP 10/100 baseT Ethernet

Preset Controls

Unit address code set switches
2 Hex switches 0 to F
Communications mode control
Select RS485 or RS422 interface

Additional Controls via RollCall Remote Control System

Full Control via active front panel or RollCall Control Panel PC Application

Specifications

Module Complement8 double width or 16 single width
(or combinations of both) fitted
vertically
Module card dimensions.....100 mm wide, 340 mm long
Module rear connector.....64 way
Module rear panel dimensions
129mm wide (-A versions)
103.4 mm wide(other versions),
40.4 mm (double width) 20 mm
(single width) high

Power

Input Voltage Range100-250 V 50/60 Hz
Input Connector..... IEC320 Fused 2.5 A(T)
Standby Switch.....Behind drop-down front panel
Power Consumption225 VA maximum
Modules Power Dissipation 141 W maximum
Output +7.5 V and -7.5 V \pm 5%
Note that all modules have built-in power supply fuses.

Mechanical

Temperature Range..... 0 to 40° C operating, -30 to +75°
storage. A temperature and load
sensitive cooling fan is fitted.
Case Type 3U rack mounting aluminum case
Dimensions..... 483 mmx415 mmx135 mm (w, d, h)
Weight Approximately 8.25 kg without
modules.
Approximately 15 kg fully
populated

Operation

This section of the manual assumes that the IQH3S Enclosure has been installed in accordance with the instructions given in the Installation Manual

To fully conform with EMC and Safety standards, modules must be correctly installed in the mainframe. Prior to connection of power the user should check the following items:

1. The rear of the mainframe must have a full complement of rear panels. Any vacant slots must have a blank rear panel fitted
2. All mainframe covers and rear panels must be fitted and screwed down using all available fixing holes
3. The mainframe front panel must be in the closed position, with the turnbuckles and screws fastened

Control Panels

A mainframe and the modules that it contains may be controlled by the following methods: -

1. Remotely, control panels connected via the RollCall communications network
2. Remotely, from computers connected via the RollCall communications network
3. Combinations of 1 and 2

The Gateway may be controlled from SNMP managers connected via IP.

The RollCall Communications System and Computer Control System

RollCall remote control gives a uniquely powerful and flexible system that can be as simple as a single rack unit with control panel, or a powerful multi-master, multi-slave configuration with PC control and monitoring for full station automation.

The RollCall command protocol obtains control information from the IQ module being addressed. This unique feature ensures that module updates or additions will not require control system software upgrades - simply plug in and switch on.

When the unit (or module) is powered-up the module will normally assume the same set-up conditions that existed at the last power-down. This information is provided by non-volatile memory on the module. Some modules incorporate methods that allow other set-up conditions to exist on power-up; please consult the information specific to each module for details.

RollCall Network System Details

The IQ Modular system has a flexible and powerful remote control system. The units in the system are joined via a high-speed network. Each box enclosure is a node on the network. A single local area network can have a maximum of 255 nodes with any combination of control panels and modular rack boxes. With the 3U box holding up to 16 cards, the system can accommodate 4080 (255 x 16) cards. Each box is physically addressed via switches on the Remote Control Interface.

Network bridges can be used to connect each network to up to 15 others nested up to 4 levels allowing tens of thousands of networks and millions of units to be joined together.

The IQH3A enclosure has various interface connections to the RollCall network:

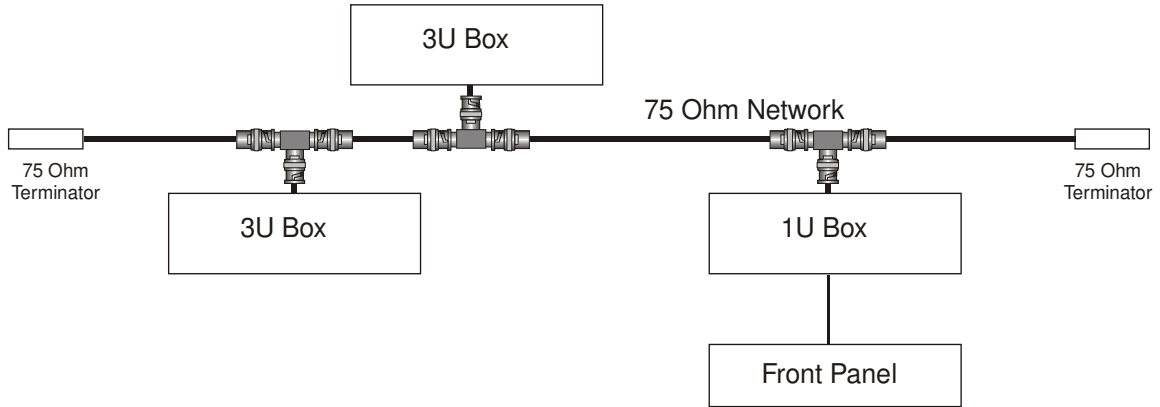
1. RollNet 75 Ohm coaxial BNC running at 2.5 Mb/s. The IQH3S enclosure represents a 2 unit load.
2. RollNet RS485 9 way 'D' connector running at 2.5 Mb/s.
3. RollNet RS485 10 way DIN connector running at 2.5 Mb/s.
4. RS422 port running at up to 115.2 Kb/s asynchronous.
5. RJ45 Ethernet running at 10/100 Mb/s (Option)

The RS422 and RS485 interfaces share the same D connector. Selection of the interface mode is made by a switch on the card front. This should be up for RS485 RollNet and down for RS422 serial.

RollNet 75 Ohm Coaxial Interface

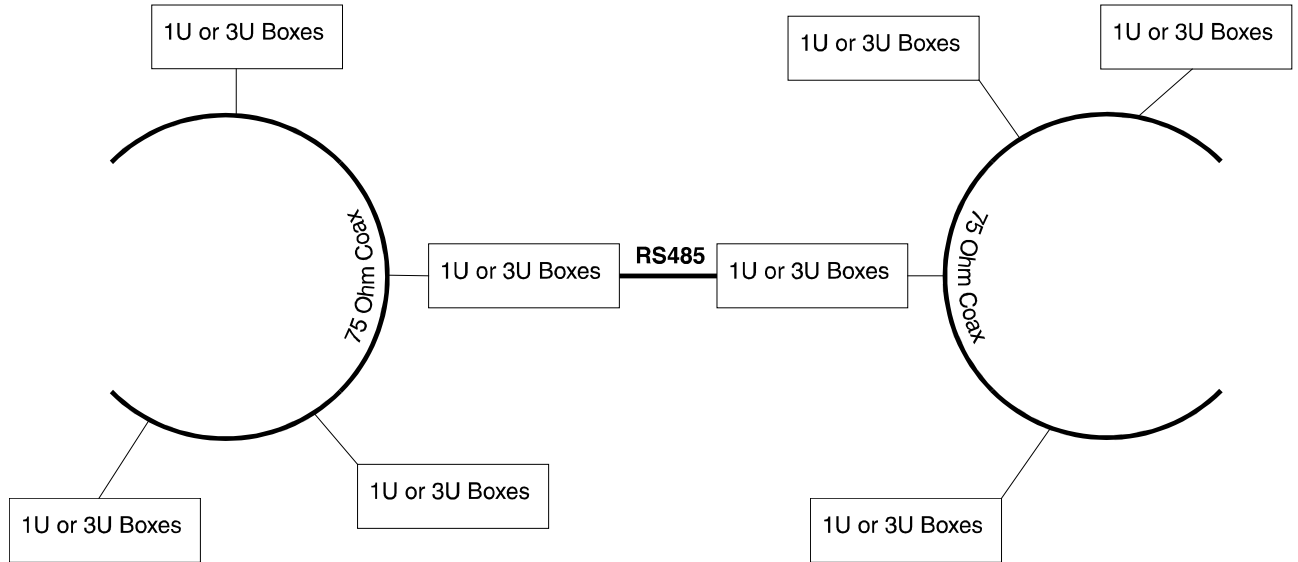
This interface allows connections of units to a single section of 75 Ohm video cable. Each unit is physically joined via a T-piece connector. Each end of the section is terminated by a 75 Ohm resistor at each end of the cable. The data rate on this interface is 2.5 Mb/s. Each section of cable can be up to 400 m.

Example configuration:



RollNet RS485 Differential Interface

Sections of the coaxial network can be joined using the RS485 bus. The RS485 connections are limited to shorter distances but are multi-drop allowing a rich combination of network configurations. The combined total number of units across the coaxial network and the RS485 bus is still 255 nodes and the total network length can be up to 1500m.



The maximum number of hub transitions between any number of nodes on a single local area network is 4.

RollNet RS485 10 way DIN connector

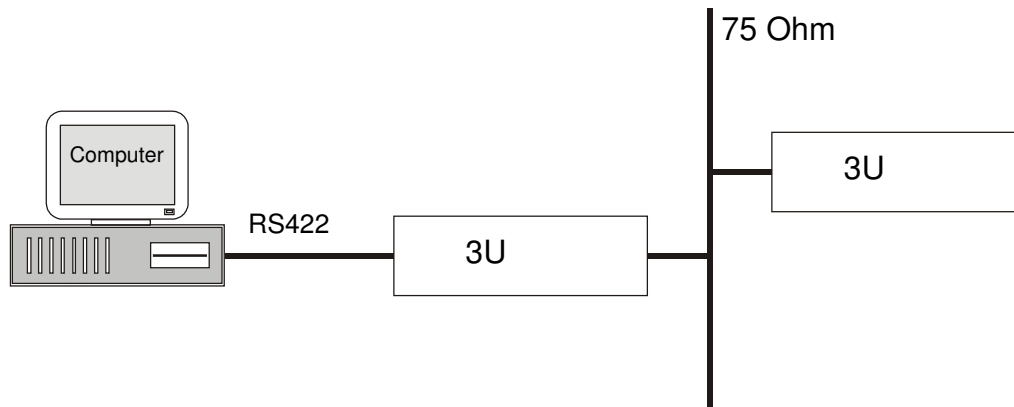
RollNet RS485 is also available on a 10 way DIN connector on the Gateway front edge. This can be used to connect an active front panel to the Gateway for configuration purposes. This connector normally drives the LED on the 3U frame front panel.

RS422 Asynchronous Interface

This interface allows a PC running RollCall control software to be connected to the RollCall network without a RollNet interface card. The PC is connected via an RS422 serial port, or an RS232 serial port via a RS422 to RS232 converter (often known as a COM port).

RS422 allows longer cable runs and offers better immunity to electrical noise, but usually requires an RS422 to RS232 converter to connect to a PC (Some specialist control PCs support RS422 directly). RS232 allows direct connection to a standard PC serial (COM port), but only supports shorter cable runs of up to 4 meters.

Example configuration:



A serial device attached to a single IQ rack has access to **all** devices on the RollCall network.

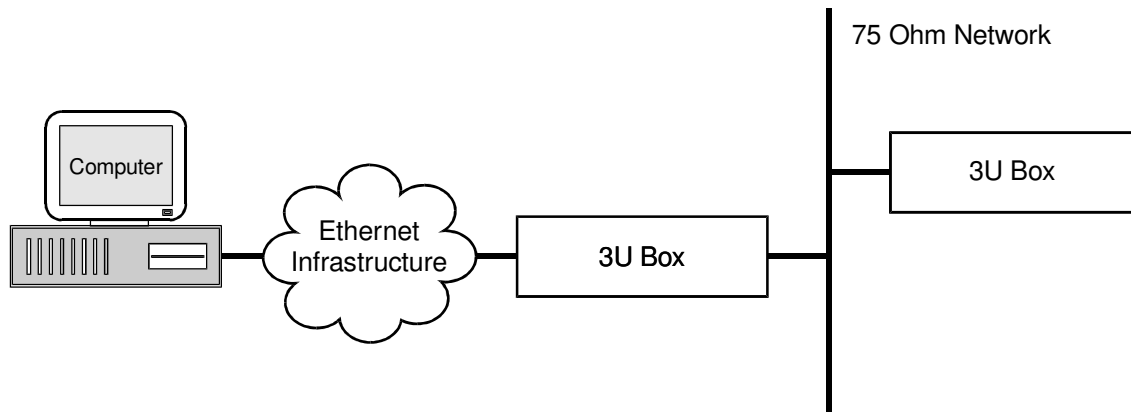
The serial port can also be used for third party connections into the system. This allows PC's or any other serial device access to any of the units within the system. Please consult Snell & Wilcox for details of the port binary protocol.

The serial port supports speeds up to 115.2 Kb/s. The RollCall PC software is limited to 57.6 Kb/s.

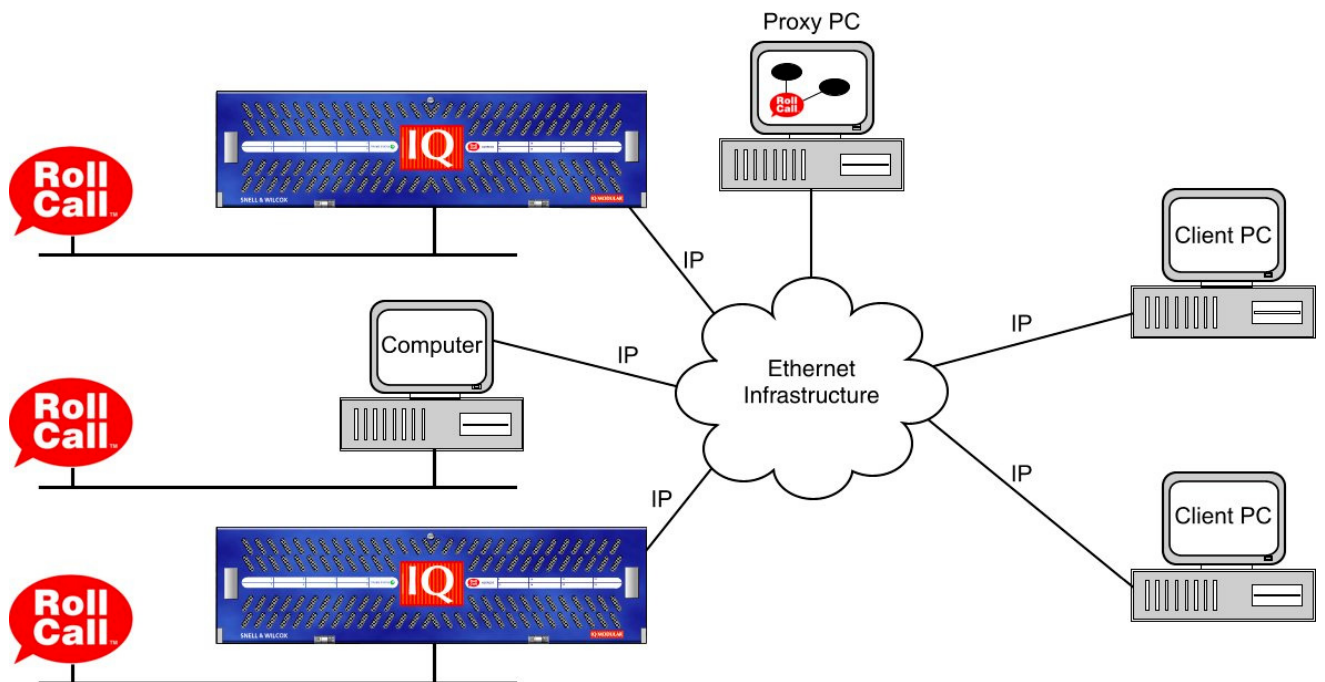
Ethernet (Option)

This interface allows the 3U box to be connected to a 10/100base-T Ethernet network. PC's can then connect to the 3U box via TCP/IP.

An Ethernet device connected to a single IQ rack has access to all devices on the RollCall network. This interface can be used to connect a PC running the RollCall PC software.



A PC can control multiple RollCall networks by connecting via RollProxy.



Configuring IP Parameters

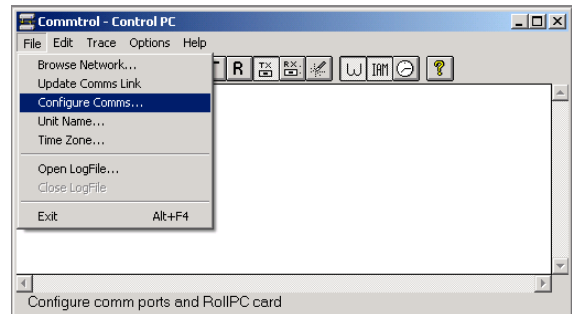
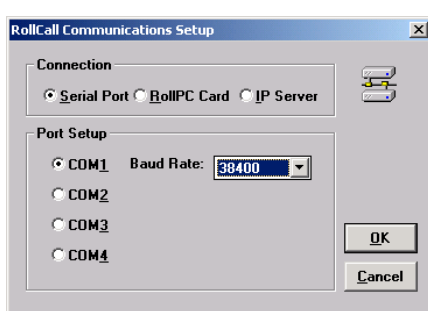
You must configure the Gateways IP parameters before you can connect to the Gateway using IP over Ethernet. To do this you must establish a connection to the Gateway using a different communications interface.

In each case you need a PC with the RollCall control software installed. You can connect the PC to the Gateway in one of three ways.

1.RollNet

If the PC is connected to an existing RollNet network, you can set the Gateway to an unused unit address, add it to the RollNet network and connect to it via RollNet.

2.Serial



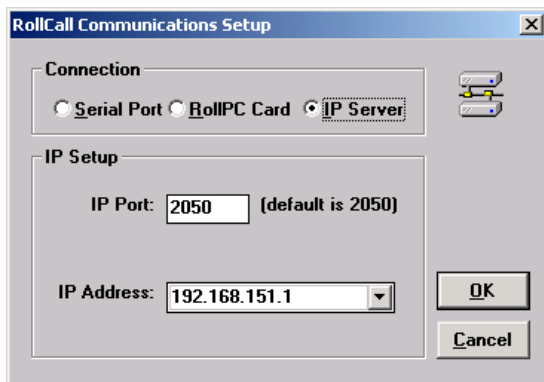
You can connect any PC with an RS232 serial (COM) port to the Gateway. By default the Gateway ships configured for RS232 at 38400 baud. Connect the PC COM to the 9 way D type labeled “Remote” on the rear of the 3U enclosure. In the Commtrol window on the PC, go to File | Configure Comms.

Select Serial Port, select the correct COM port and set the Baud rate to 38400. You should now be able to connect to the Gateway.

3. IP Crossover Cable

You can connect the any PC with a 10Base-T or 100Base-T RJ45 Ethernet port to the Gateway using an RJ45 crossover cable. This looks like a standard RJ45 patch cable, but is wired differently. Connect the crossover cable to the RJ45 ports on the PC and on the rear of the 3U enclosure. Configure the PC to use the following IP parameters:

IP address : 192.168.151.2
 Subnet mask : 255.255.0.0
 Default IP Gateway : blank



In the Commtrol window on the PC, go to File | Configure Comms. Select IP Server and set the IP address to 192.168.151.1. You should now be able to connect to the Gateway.

In each case you should now be able to connect to the Gateway and configure the IP parameters.

SNMP (Simple Network Management Protocol) (Option)

The Gateway can run an SNMP agent which allows direct control of its own controls. Unlike a RollCall IP connection, an SNMP connection is for this 3U box only. If you wish to control other 3U boxes then each must be connected via Ethernet and controlled by SNMP individually.

SNMP also provides logging information. Log messages, similar to those sent to a RollCall logserver, can be sent to up to 8 separate destinations (SNMP trap destinations).

In order to manage and monitor a 3U box, please consult documentation provided for "SNMP management, control and monitoring", which would show how you could control a 3U box using CastleRock SNMP Manager.

By default, the SNMP agent is enabled. A proprietary SNMP manager (Eg CastleRock SNMPc) must be set up on a PC, also connected to the IP network. A number of MIB modules (text files) have been created that map controls for each card type and provide other mappings. These are required in the SNMP manager operation.

At a minimum, to control the gateway, you need the following MIBs:

SNELL-WILCOX-SMI.MIB

SNELL-WILCOX-TC.MIB

SNELL-WILCOX-UNIT.MIB

SNELL-WILCOX-PRODUCT-REG.MIB (Id for each card type)

SNELL-WILCOX-MODULAR-GATEWAY.mib (Gateway controls)

RollCall PC Control Panel Screens for the IQH3S Enclosure

Control (1-8) and (9-16)

These pages display information about the controllers for each slot.

Packet Count

When the modules receive commands from control clients the number of commands are counted.

If the **Update Packet Stats** item is checked the number of control packets from the currently selected connected controller and from all connected controllers is shown to the right of the controller address. The number of blind control packets is shown to the right of the blind controller address.

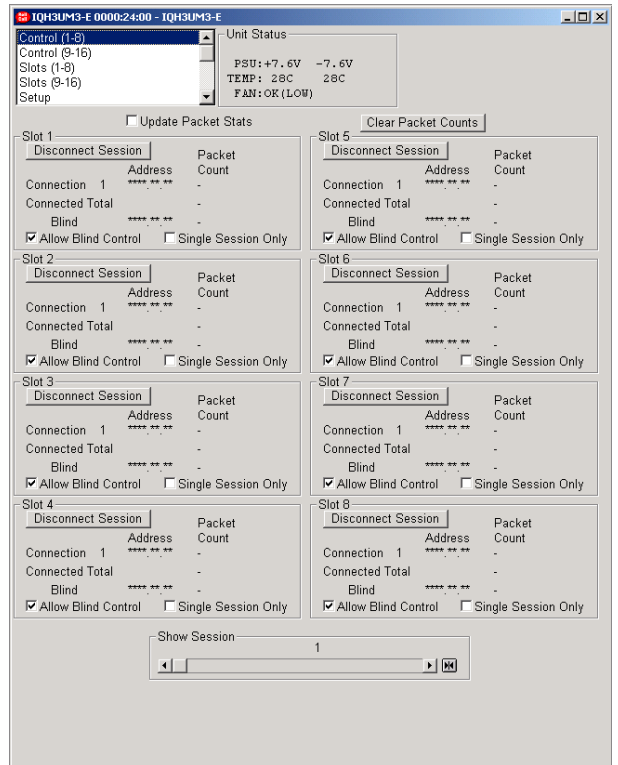
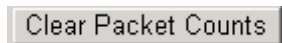
If the **Update Packet Stats** item is unchecked the packet counts will be replaced with dashes (-).

Update Packet Stats

When checked the packet counts will be updated. When unchecked the packet counts the packet counts will be replaced with dashes (-).

*Note that the packets are still counted while **Update Packet Stats** is disabled. When enabled the Gateway will display current totals; they will not restart from zero.*

[Active Front Panel :
Control - Pkt Stats - Update Packet Stats]



When selected this item will reset all of the packet counters to zero.

[Active Front Panel :
Control - Pkt Stats - Clear Packet Counts]

Show Session

This controls which client is displayed by the other Control menu items.

[Active Front Panel :
Control - Show Session]

Control (1-8) and (9-16) (Continued)

These pages show information about control clients.

Active Front Panels and RollCall PC programs use a RollCall connection to control a module.

RollTrack does not use a connection, it uses Blind control. Blind Control is the ability to control a unit without a connection.



This will disconnect the currently displayed connected controller.

[Active Front Panel :
Control - Slot n - Disconnect Session]

Connect

This displays the address of the connected controllers. The Show Session control can be used to scroll through the connected controllers. If SNMP is enabled, then the Gateway itself will be shown as one of the controllers, usually the first controller.

Packet counts from this controller, and from all connected controllers are displayed to the right.

[Active Front Panel :
Control - Slot n – Controller
Control - Slot n - Con Pkt Count &
Control - Slot n - Con Pkt Total]

Blind

This will display the address of last controller to send the module a blind control packet.

Packet counts from blind controllers is shown to the right.

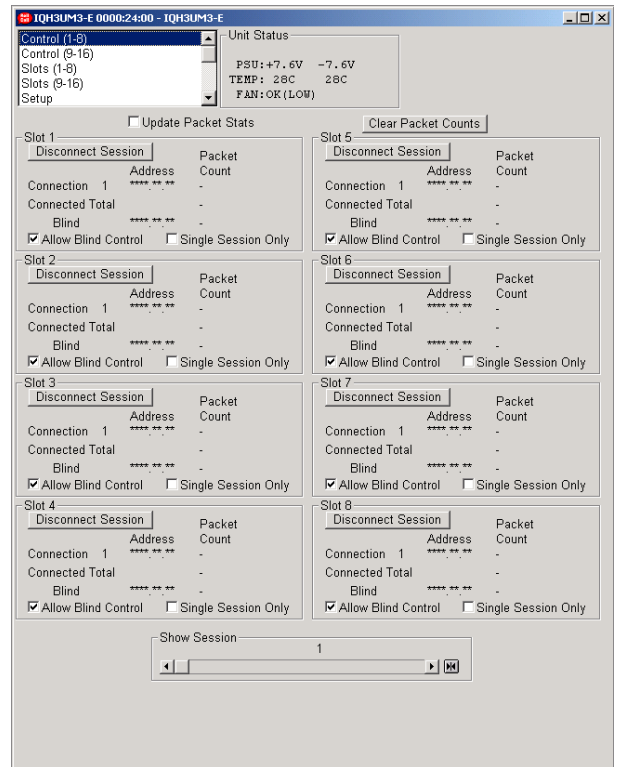
[Active Front Panel :
Control - Slot n - Last Blind User
Control - Slot n - Blind Pkt Count]

Allow Blind Control

If the module will be controlled by Blind Control (RollTrack and some third party remote control systems) then Allow Blind must be enabled.

If Blind Control is not used then Allow Blind may be disabled, giving protection against incorrectly set-up RollTrack sources.

[Active Front Panel :
Control - Slot n - Allow Blind Control]



Single Session Only

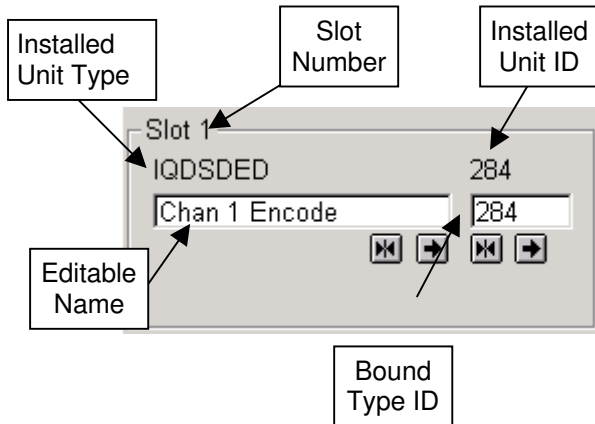
When checked this allows only one connected controller to control the module at any one time.

[Active Front Panel :
Control - Slot n - Single Session Only]

Slots (1-8) and (9-16)

These pages allow each slot to be named and interrogated.

Overview



Installed Unit Type

This shows the type of the module that is fitted in the slot.

[Active Front Panel :
Slots - Slot n - Installed Unit]

Installed Unit ID

This shows the unique Type ID Number of the module that is fitted in the slot.

[Active Front Panel :
Slots - Slot n - Installed Type]

Editable Name

This allows a slot to be given a user name e.g. "Chan 1 Encode" and so long as the correct card stays in that slot this name will be used. However, if the card is replaced with an incorrect type e.g. a serial interface, the card will appear by its type generic name e.g. IQCSPI.

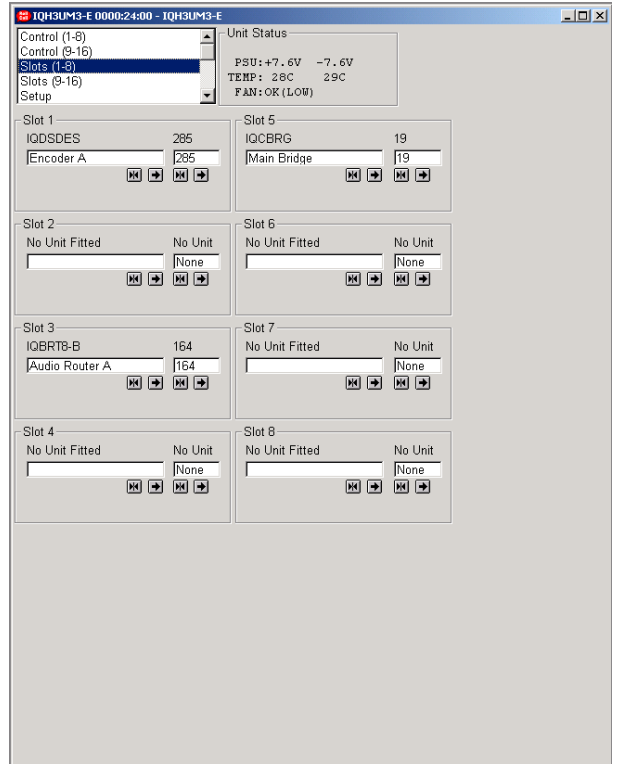
[Active Front Panel :
Slots - Slot n - Name]

Bound Type ID

The Bound Type function allows the slot to be associated with a particular type of module (e.g. a encoder type 284). If a module matching this type ID is fitted, the Gateway will use the user given name. If an incorrect card type is installed in the slot the RollCall ID will not be correct and the actual card type will be displayed in the module browser.

The names and types may be setup before the installation of the modules.

[Active Front Panel :
Slots - Slot n - Bound Type]



Examples of Use

Intentionally Empty Slot

If the slot **should not** have a module installed the Installed Unit Name widow will show **No Unit Fitted** and the Installed Unit ID window will show **No Unit**.



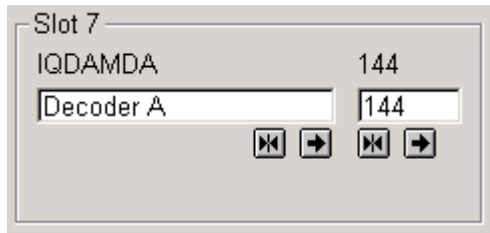
Gateway

The editable name widow will be empty and the Bound Type ID widow will show **None**.

In the absence of other modules the Gateway will log Module Status as OK, and show Module Status = OK on the Logging Page.

Correct Module Fitted

If a module is fitted that matches the bound type then the editable name is used in the network browser.



In the absence of other modules the Gateway will log Module Status as OK, and show Module Status = OK on the Logging Page.

Module Absent – Unit Bound

If the slot should have a particular module fitted (as set by the Bound Unit function) but if no module is fitted the Installed Unit Name widow will show **No Unit Fitted** and the Installed Unit ID widow will show **No Unit**.

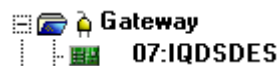
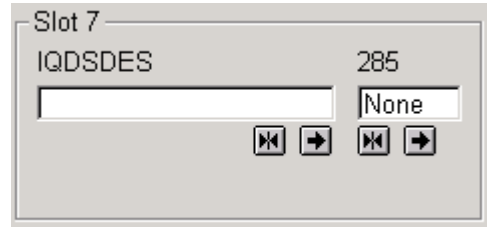


However, the editable name widow will show the intended name and the Bound Type ID widow will show the intended ID.

In the absence of other modules the Gateway will log Module Status as 1 Module Missing, and show Module Status = 1 Module Missing on the Logging Page.

Module Fitted – No Bound Unit

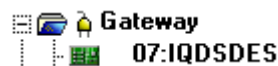
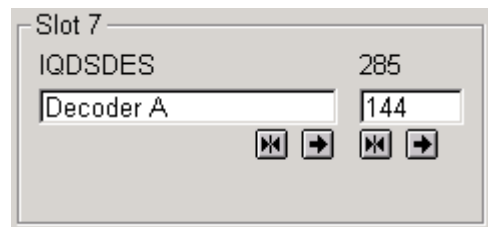
If a module is fitted in the slot but no bound type is assigned to this slot then the slot will show the generic type name for the module type and will appear in the network browser by its slot number and generic type.



In the absence of other modules the Gateway will log Module Status as 1 Extra Module, and show Module Status = 1 Extra Module on the Logging Page.

Incorrect Module Fitted

If a module is fitted that does not match the bound type then the editable name will not be used and the generic type and slot number will appear in the network browser.



In the absence of other modules the Gateway will log Module Status as 1 Wrong Module, and show Module Status = 1 Wrong Module on the Logging Page.

Setup

This function allows various system functions to be set up.

Unit Name

This allows the unit to be given a meaningful name.

[Active Front Panel:

System - Setup - System - Setup - Unit Name]

Serial Number

This shows the serial number of the unit.

[Active Front Panel:

System - Setup - Serial Number]

Hardware Version

This shows the version number of the hardware used in the Gateway.

[Active Front Panel:

System - Setup - System - Setup - Hardware Version]

Software version

This shows the software version installed.

[Active Front Panel:

System - Setup - System - Setup - Software Version]

Build Number

This shows the software build number of the unit.

[Active Front Panel:

System - Setup - Build Number]

Report if PSU'S Missing

When these boxes are checked it will allow a missing PSU report to be displayed in the Unit Status area and logged.

If two power supply units are fitted, (dual redundancy supply configuration) the Left PSU and the Right PSU items should be selected.

If for some reason one of the power supplies is removed a warning will be displayed, indicating which power supply is missing.

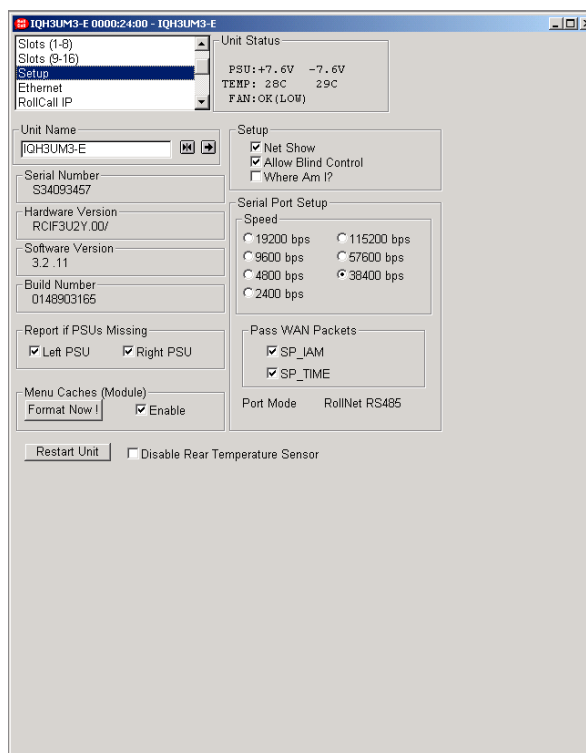
If only one power supply is fitted, only the corresponding checkbox should be selected and the other cleared.

If a PSU is fitted but fails or is turned off then a warning message will always be generated.

[Active Front Panel:

System - Setup - Monitor PSUs - Left PSU

System - Setup - Monitor PSUs - Right PSU]



Menu Caches (Module)

The Gateway caches module menu sets locally to improve menu upload speeds. In rare circumstances this may cause problems. If problems with module menu uploads are encountered the menu caches can be cleared or caching disabled.

Format Now!

This deletes the existing module menu caches. The caches will be recreated when the next menu client connects.

[Active Front Panel:

System - Setup – Format Menu Cache]

Enable

When this checkbox is set the Gateway will cache module menus sets. Clearing this checkbox will disable caching and increase menu upload times.

[Active Front Panel:

System - Setup – Enable Menu Cache]

Disable Temperature Sensor

There is a temperature sensor located at the rear fan. With certain combinations of older 3U frames and modules reading the sensor could potentially cause a communication issue. Setting this control will prevent the Gateway from reading the sensor, eliminating the possibility of this issue occurring.

This should only be used if recommended by Snell & Wilcox.

[Active Front Panel:

System - Setup - Disable Temp Sensor]

Setup (cont)

Net Show

This function allows a unit to be 'hidden' from the network system.

When netshow is active the unit broadcasts its presence.

Note that if the unit address is changed Netshow will automatically be turned On.

[Active Front Panel:
System - Setup - NetShow]

Allow Blind Control

If the Gateway will be controlled by Blind Control then Allow Blind Control must be enabled.

If Blind Control is not used then Allow Blind Control may be disabled, giving protection against incorrectly set-up RollTrack sources.

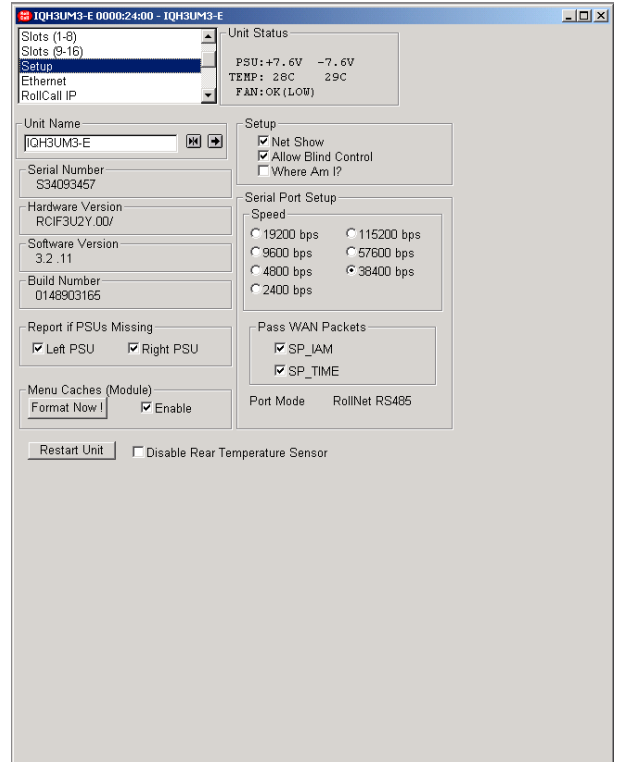
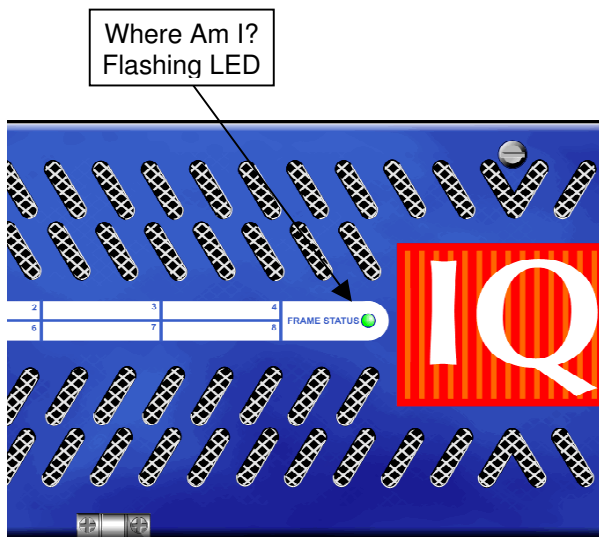
[Active Front Panel:
System - Setup - Allow Blind Ctl]

Where Am I?

This allows the 3U enclosure to be physically located in a large system.

When this function is selected the LED indicator on the front panel of the enclosure will flash red and green.

[Active Front Panel:
System - Setup - Where Am I?]



This control will re-boot the unit. This will terminate any connections to the Gateway and to modules in the 3U frame.

[Active Front Panel:
System - Setup - Restart Unit]

Setup (cont)**Serial Port Setup****Speed**

This group allows the serial port to be configured.

The baud rate is set between 2400 and 115200 baud.

The default speed for all RollCall serial connections is 38,400 bps.

NB The RollCall PC software only supports speeds up to 57600 baud.

[Active Front Panel:
System - Setup - Serial Speed]

SP_IAM

This controls whether the Gateway passes wide area I_AM packets from the serial port to the RollCall Network. Normally this is enabled to allow PCs attached to the serial port to be located by other units, but it may be disabled if you wish to control the flow of I_AM packets through a system.

NB Pass I_AM (Bridge) overrides both **Pass I_AM (Serial)** and **Pass I_AM (IP)**. So if **Pass I_AM (Bridge)** is set I AM messages will be passed over the bridge, irrespective of how the other controls are set.

[Active Front Panel:
System - Setup - Pass I_AM (Serial)]

SP_TIME

This controls whether the Gateway passes wide area TIME packets from the serial port to the RollCall Network. Normally this is enabled to allow PCs attached to the serial port to be time servers, but it may be disabled if you wish to control the flow of TIME packets through a system.

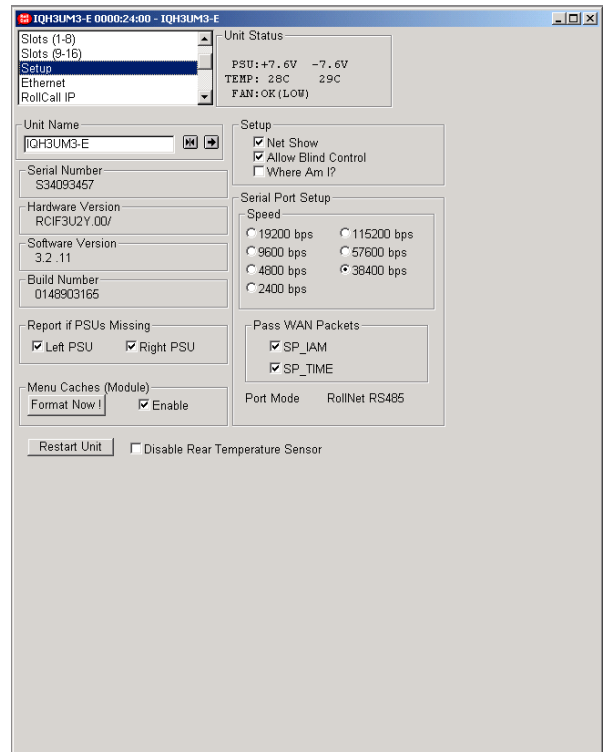
NB The Gateway will always use the received time stamp, whether it passes it on or not (but see also **Time from Logger**).

[Active Front Panel:
System - Setup - Pass TIME (Serial)]

Port Mode

This item shows the current operating mode of the serial port (RS422 or RS485).

[Active Front Panel:
System - Setup - Serial Mode]



Ethernet (Option)

IMPORTANT NOTE

Altering any of these settings whilst connected to the Gateway via IP may result in the connection being lost. If the new values are incorrect it may not be possible to reestablish the connection via IP and a connection via RollNet or the serial port will have to be made to correct the settings. The network administrator should be able to give the correct setting for these controls.

Default Settings

The IQ Gateway ships with the following default settings:

IP address : 192.168.151.001
 Subnet mask : 255.255.000.000
 Default IP Gateway : 000.000.000.000.

A connection via RollNet, serial or to a PC on a compatible IP address must be established and these parameters configured before the unit can be successfully connected to an Ethernet network.

Unit IP Address

This allows the IP address to be entered.
 [Active Front Panel:
 Ethernet - Ethernet - IP address]

Subnet mask

This allows the Subnet mask address to be entered.
 [Active Front Panel:
 Ethernet - Ethernet - Subnet mask]

Default gateway address

This allows the Default IP Gateway address to be entered.
 [Active Front Panel:
 Ethernet - Ethernet - Default IP gateway]

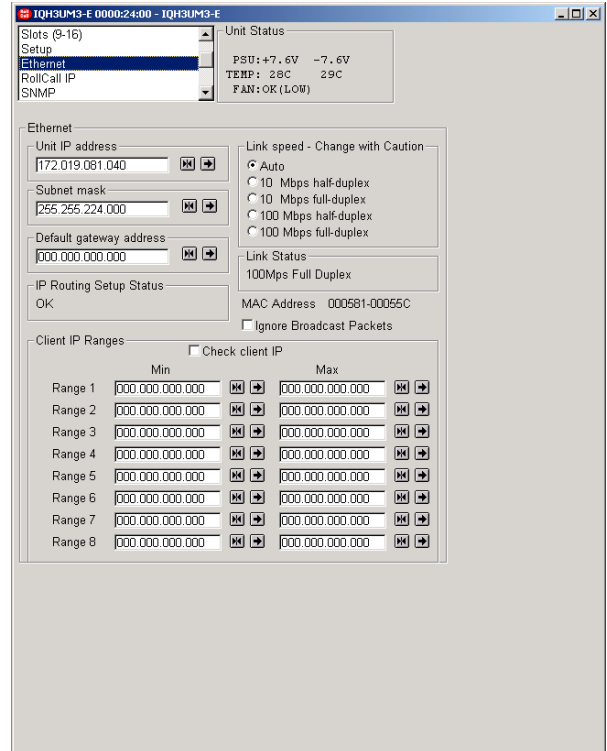
IP Routing Setup Status

This will display the status of the IP routing. It could show:

FAIL. IP Address, Subnet Mask and Default Gateway IP Address are not compatible with each other.

OK.... IP Address, Subnet Mask and Default gateway are compatible.

[Active Front Panel:
 Ethernet - Ethernet - IP Routing]



Link Speed

The link type and speed may be selected from these items.

Auto.. This is the default setting.

The alternative manual settings may be used if the switch does not support auto selection.

[Active Front Panel:
 Ethernet - Ethernet - Link speed]

Link State

This shows the current status of the Ethernet link. It will either report 'No Link' or the current link speed.

[Active Front Panel:
 Ethernet - Ethernet - Link State]

MAC address

This item will show the MAC address, which is a globally unique number identifying an Ethernet unit.

[Active Front Panel:
 Ethernet - Ethernet - MAC address]

Ignore Broadcast Packets

Warning: This should only be checked if it is possible to resolve IP address to MAC addresses without using the ARP protocol.

Please refer to *RollCall System Integrators Manual*.

[Active Front Panel:
 Ethernet - Ethernet - Ignore b'cast pkts]

Ethernet (Option) (Cont)

Check client IP

When selected only clients from any of the address ranges listed below would be allowed to control this unit.

[Active Front Panel:
Ethernet - Ethernet - Check client IP]

Client IP Ranges

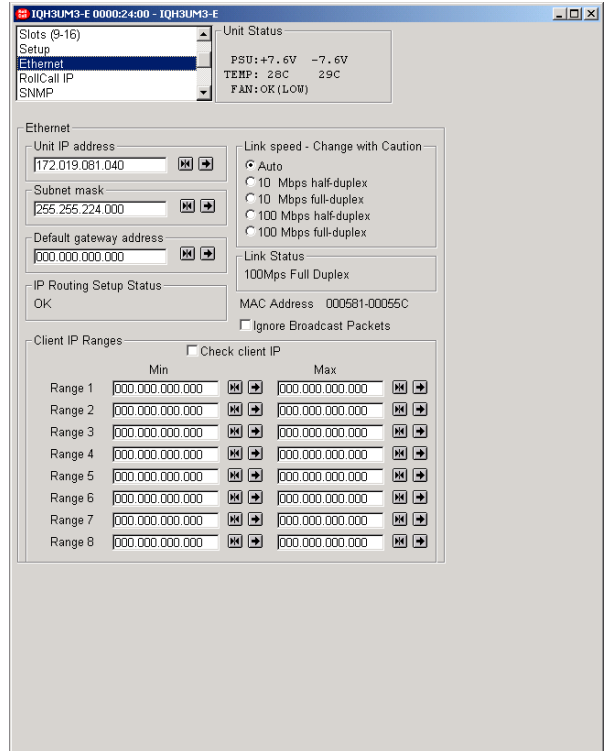
This item allows the permitted Client IP address to be entered.

The Gateway can be configured with one or more IP client ranges. Each range is specified by a minimum and maximum pair of IP addresses. If **Check client IP** is set then only connections from clients with IP addresses in one of these ranges will be accepted. To specify single IP address, set a minimum and maximum pair to the same address. Ranges where Min or Max is set at 000.000.000.000 are ignored.

NB If **Check client IP** is checked and no IP ranges are set, no IP connections will be accepted.

Altering these items only affect new connections; it will not disconnect existing IP connections. This is to prevent errors breaking the connection being used to make the changes.

[Active Front Panel:
Ethernet - Ethernet - Client IP Ranges - Min 1-8
Ethernet - Ethernet - Client IP Ranges - Max 1-8]



RollCall IP (Option)

This page reports various statistics about IP share connections and allows configuration of the IP bridge function.

Enable Net Stats

If the **Enable Net Stats** is checked then the various packet counters will be constantly updated.

While Update Packet Stats is disabled these will display a dash (-).

[Active Front Panel:

System - Statistics - Enable Net Stats]

Reset Packet Counts

When selected this item will reset all of the packet counters to zero.

[Active Front Panel:

System - Statistics - Reset Net Stats]

IP Share Port

The Gateway will accept IP Share connections on this IP port number. The default is 2050.

[Active Front Panel:

Ethernet - Ethernet - IP Share Port]

Pass WAN Packets

SP_IAM

If this checkbox is checked then the Gateway will pass wide area I AM messages received on IP share links to the RollNet network, and over the IP bridge (if connected).

NB Pass I_AM (Bridge) overrides both **Pass I_AM (Serial)** and **Pass I_AM (IP)**. So if **Pass I_AM (Bridge)** is set I AM messages will be passed over the bridge, irrespective of how the other controls are set.

[Active Front Panel:

Ethernet - Ethernet - Pass I_AM (IP)]

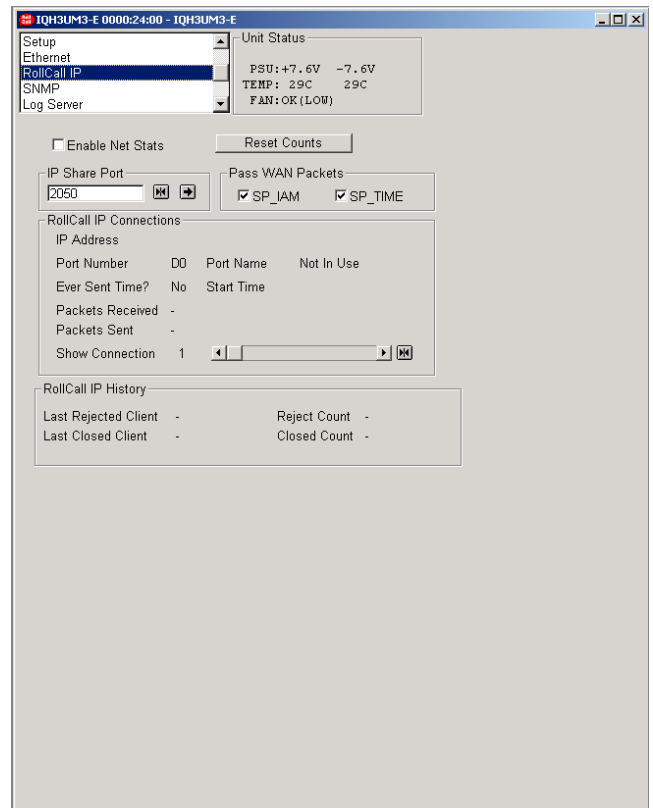
SP_TIME

If this checkbox is checked then the Gateway will pass wide area TIME messages received on IP share links to the RollNet network, and over the IP bridge (if connected).

NB The Gateway will always use the received time stamp, whether it passes it on or not (but see also **Time from Logger**).

[Active Front Panel:

Ethernet - Ethernet - Pass Time (IP)]



RollCall IP (Option) (continued)

RollCall IP Connections

This shows information about IP connections to the Gateway from IP Share or IP Proxy. The information displayed refers to a single connection. Which connection is displayed is controlled by the **Show Connection** control.

IP Address

This shows the IP address of the remote unit on this IP connection.

[Active Front Panel:
Ethernet - RollCall IP Stats - Addr]

Port Number

This shows which RollCall port on the Gateway this IP connection corresponds to.

[Active Front Panel:
Ethernet - RollCall IP Stats - RollCall Port]

Port Name

This shows the name under which this IP connection appears.

[Active Front Panel:
Ethernet - RollCall IP Stats - Name]

Ever Sent Time?

This shows if the remote unit on this IP connection has ever sent us a TIME packet.

[Active Front Panel:
Ethernet - RollCall IP Stats - Ever Sent Time?]

Start Time

This shows the time at which this IP connection was started.

[Active Front Panel:
Ethernet - RollCall IP Stats - Start Time]

Packets Received

This shows how many packets have been received on this IP connection.

[Active Front Panel:
Ethernet - RollCall IP Stats - Packets Received]

Packets Sent

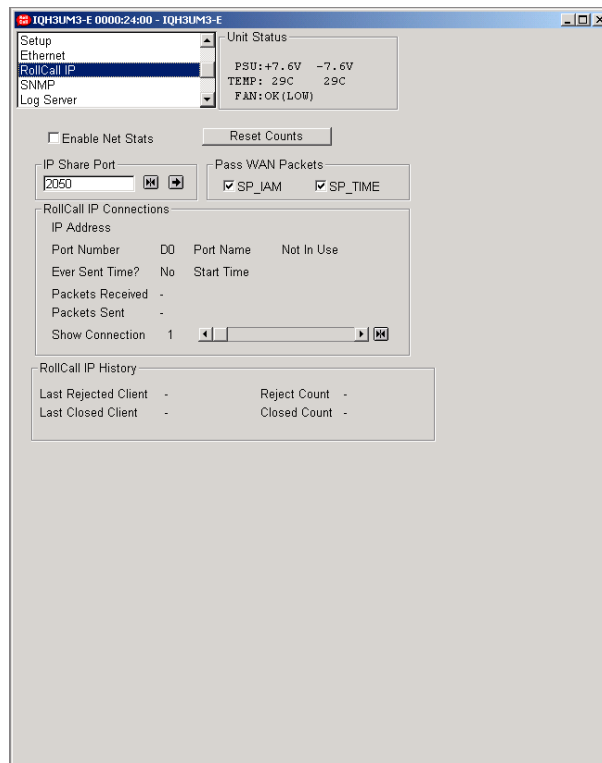
This shows how many packets have been transmitted on this IP connection.

[Active Front Panel:
Ethernet - RollCall IP Stats - Packets Sent]

Show Connection

This controls which IP connection the Gateway shows statistics for.

[Active Front Panel:
Ethernet - Ethernet - Pass Time (IP)]



RollCall IP History

The Gateway may reject IP connections if they do not match the client address set or if the limit on IP connections has been reached.

Last Rejected Client

This shows the IP address of the last client that the Gateway rejected.

[Active Front Panel:
Ethernet - RollCall IP Stats - Last Reject Client]

Reject Count

This shows the number of attempted IP connections that this Gateway has rejected.

[Active Front Panel:
Ethernet - RollCall IP Stats - Reject Count]

Last Closed Client

IP address of the last client (bridge or other) to close their connection to gateway.

[Active Front Panel:
Ethernet - RollCall IP Stats - Last Closed Client]

Closed Count

This shows how many IP connections have been closed. The count includes connections that have been closed by the Gateway and by the remote client.

[Active Front Panel:
Ethernet - RollCall IP Stats - Closed Count]

SNMP (Simple Network Management Protocol) (Option)

Overview

This page allows configuration of the SNMP agent that operates within the gateway card.

Note that in order for the SNMP to operate the TCP/IP stack and Ethernet must be enabled and a physical connection available.

Enable SNMP

This enables or disables the SNMP functions of the Gateway.

[Active Front Panel: Ethernet - SNMP - Enable SNMP]

Read community

Configures the SNMP read community value. Default value "public". [Active Front Panel: Ethernet - SNMP - Read community]

MIB2 sysContact

Customer given name of person responsible for equipment.

[Active Front Panel: Ethernet - SNMP - MIB2 sysContact]

MIB2 sysLocation

Customer given physical or logical location of system.

[Active Front Panel: Ethernet - SNMP - MIB2 sysLocation]

Write community

Configures the SNMP write community value. Default value "private".

[Active Front Panel: Ethernet - SNMP - Write community]

MIB2 sysName

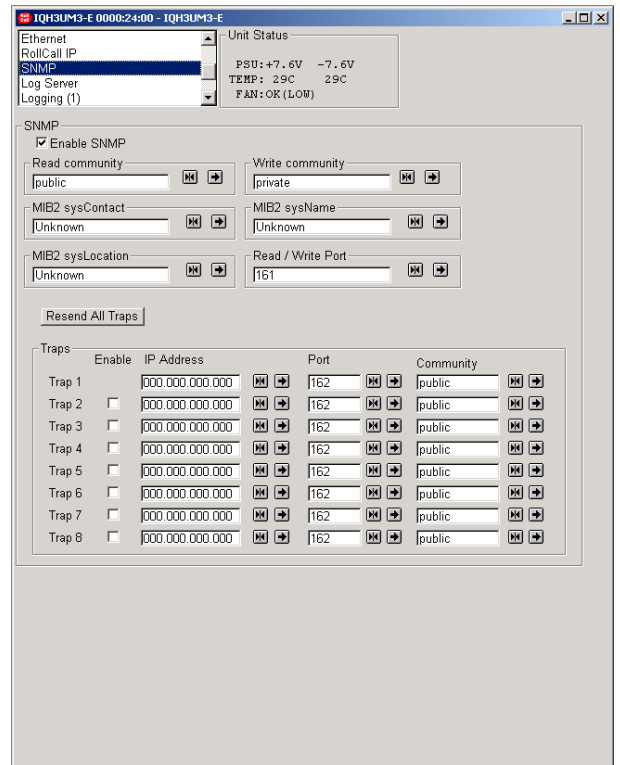
Name of system if applicable.

[Active Front Panel: Ethernet - SNMP - MIB2 sysName]

Read Write Port

TCP/IP port number (range:1-65535) used in all SET and GET SNMP operations. Default is 161. The SNMP manager should match this value to operate correctly.

[Active Front Panel: Ethernet - SNMP - Read Write Port]



SNMP (Option) (Continued)

Resend All Traps

Action: resends all current traps/notifications for all occupied slots and gateway card. If legacy operation is enabled, the associated traps are also sent.

[Active Front Panel:
Ethernet - SNMP - Resend Traps]

Traps

The Gateway supports up to eight trap destinations. For each trap the user can configure:

IP address

The IP address, format nnn.nnn.nnn.nnn, to which notifications (traps) are sent. This address should correspond to the IP address of the PC monitoring notifications.

[Active Front Panel:
Ethernet - SNMP - Traps - Trap Dest n -
Trap dest IP addr]

Port

The connection port address used to send notifications. The target machine (IP address) should be configured to "listen" for notifications on this port. The SNMP default is 162, but other port numbers may be used.

[Active Front Panel:
Ethernet - SNMP - Traps - Trap Dest n -
Trap dest port]

Community

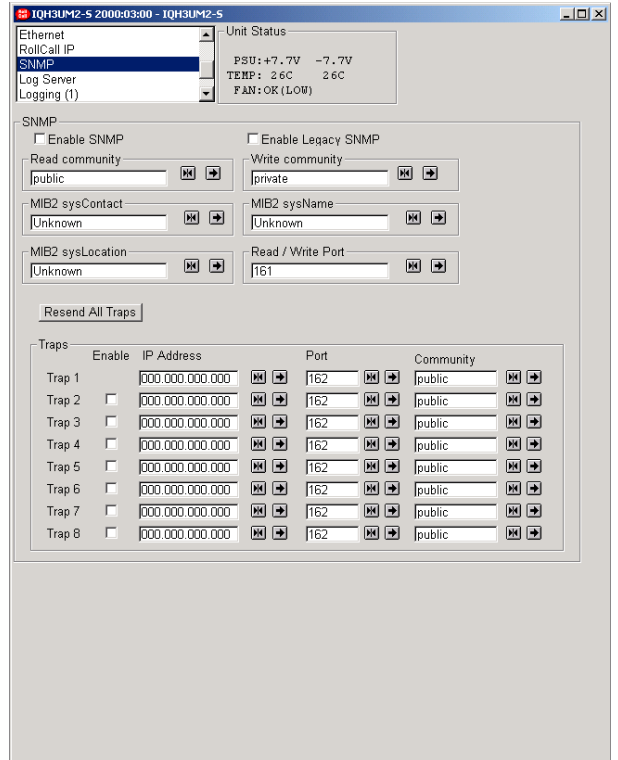
Trap Community string. This string is included within the SNMP trap message .

[Active Front Panel:
Ethernet - SNMP - Traps - Trap Dest n -
Trap community]

Enable

Enable this Trap destination. Trap dest 1 is always enabled when SNMP is enabled, so it has no enable control.

[Active Front Panel:
Ethernet - SNMP - Traps - Trap Dest n -
Enable Trap]



Log Server

This menu allows the characteristics of the logging server to be specified.

LogServer Name

The Logging Server to be used may be named by editing the text string in the text window.

[Active Front Panel:
Logging - Log Server - LogServer Name]

Log Disabled

If this item is checked the Logging function will be disabled.

[Active Front Panel:
Logging - Log Server - Log to - Logging Disabled]

Named server

If this item is checked Logging information will only be sent to the server named in the name window.

[Active Front Panel:
Logging - Log Server - Log to - Named LogServer]

Any Logger

If this item is checked Logging information will be sent to any Logger on the system.

It is suggested that if there is only one server on the system, this option should be chosen

[Active Front Panel:
Logging - Log Server - Log to - Any LogServer]

Using

This displays the name and RollCall address of the current Log Server. If the Gateway does not have a logserver this will show "No Active Logger"

[Active Front Panel:
Logging - Log Server - Cur. Logger
Logging - Log Server - Cur. Logger Addr]

Accept logserver via RollNet

If this is selected, the Gateway will accept servers packets via the RollNet port.

[Active Front Panel:
Logging - Log Server - Accept via RollNet]

Accept logserver via IP

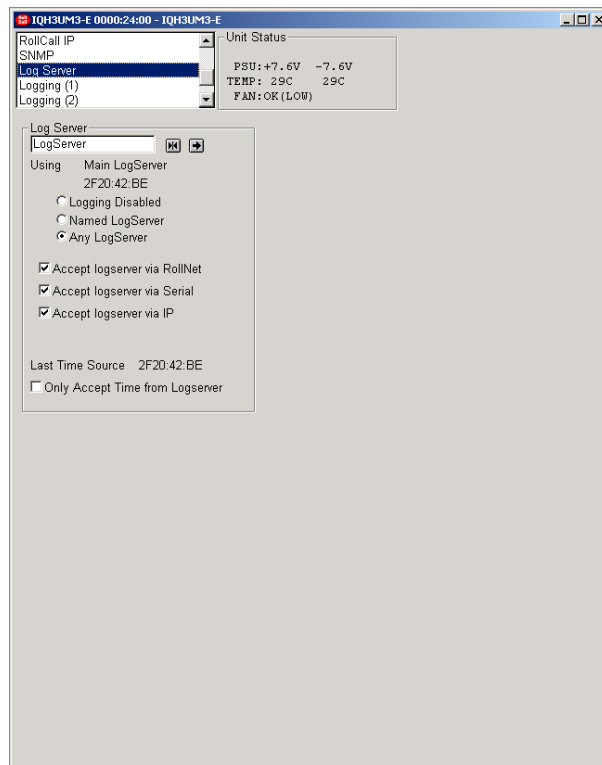
If this is selected, the Gateway will accept servers packets via the IP port.

[Active Front Panel:
Logging - Log Server - Accept via IP]

Accept logserver via Serial

If this is selected, the Gateway will accept servers packets via the serial port.

[Active Front Panel:
Logging - Log Server - Accept via Serial]



Last Time source

This shows the address from which the last time packet was received. This can be useful in configuring complex networks.

[Active Front Panel:
Logging - Log Server - Last Time addr]

Only Accept Time from Logserver

If this is selected the Gateway will only use time packets from the current logserver. This can be useful in configuring complex networks.

[Active Front Panel:
Logging - Log Server - Time from Logger]

Logging 1

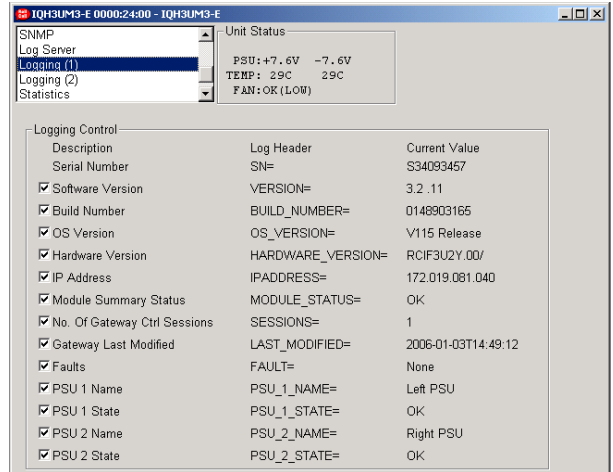
This page shows the information made available via RollCall logging, and allows the user to specify which fields will be logged.

Each log field is shown on a separate line. Each has an enable checkbox, a descriptive name, the log field header and the current value.

The only exception is **Serial Number**, which is always logged and therefore has no enable checkbox.

When the checkbox is checked that field will be logged to the logserver.

[Active Front Panel:
 Logging - Log **Field_Name**
 Logging - **Field_Name** =]



Field Name	Meaning	Possible Values
SN	Serial Number	Serial Number of Unit
VERSION	Software Version Number	E.g. 3.2.11
BUILD_NUMBER	Software Build Number	E.g. 0148903165
OS_VERSION	Operating System Version	E.g. V115 Release
HARDWARE_VERSION	Hardware version Number	E.g. RCIF3U2Y.00/
IPADDRESS	IP Address of the Gateway	IP Address as dotted string
MODULE_STATUS	Shows if the installed modules match the set bound types, or if there are extra, missing or mismatched modules.	OK 1 EXTRA MODULE n EXTRA MODULES 1 MODULE MISSING n MODULES MISSING 1 WRONG TYPE n WRONG TYPES
SESSIONS	Number of connected control sessions. Not that if SNMP is enabled this will show one session for the SNMP agent.	Number of Sessions
LAST_MODIFIED	Last time at which a control was altered by a controller	Time stamp at which a control packet was received (ISO 8601 format)
FAULT	Records various fault conditions	OK FAIL:Local Temp Sensor Failed FAIL:Rear Temp Sensor LM80 Not Found FAIL: Rear Temp Sensor LM80 Failed
PSU_1_NAME	Name of 1 st Power Supply Unit	Left PSU
PSU_1_STATE	State of 1 st Power Supply Unit	OK FAIL FAIL:Not Fitted Not Used
PSU_2_NAME	Name of 2 nd Power Supply Unit	Right PSU
PSU_2_STATE	State of 2 nd Power Supply Unit	OK FAIL FAIL:Not Fitted Not Used

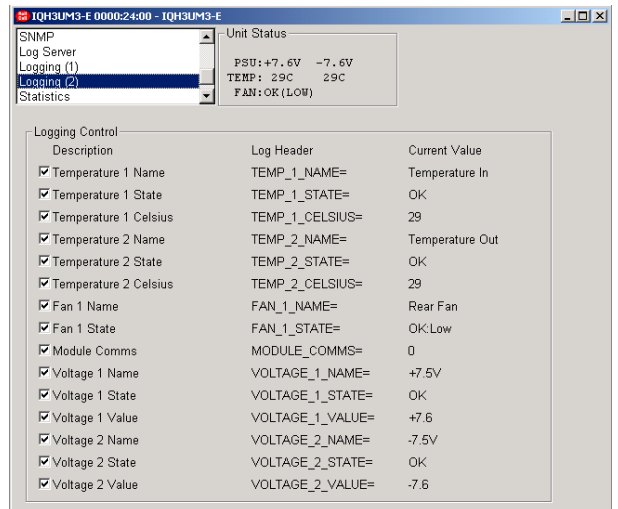
Logging 2

This page shows the information made available via RollCall logging, and allows the user to specify which fields will be logged.

Each log field is shown on a separate line. Each has an enable checkbox, a descriptive name, the log field header and the current value.

When the checkbox is checked that field will be logged to the logserver.

[Active Front Panel:
 Logging - Log **Field_Name**
 Logging - **Field_Name** =]



Field Name	Meaning	Possible Values
TEMP_1_NAME	Name of 1 st temperature sensor	Temperature In
TEMP_1_STATE	State of 1 st temperature	OK WARN:Low (0≤temp<5) WARN:High (35<temp≤40) FAIL:Low (temp< 0) FAIL:High (temp > 40)
TEMP_1_CELSIUS	Value of of 1 st temperature	Temperature in Celsius
TEMP_2_NAME	Name of 2 nd temperature sensor	Temperature Out
TEMP_2_STATE		OK WARN:Low (0≤temp<5) WARN:High (55<temp≤60) FAIL:Low (temp< 0) FAIL:High (temp > 40) FAIL:Not Available
TEMP_2_CELSIUS	Value of of 2 nd temperature	Temperature in Celsius
FAN_1_NAME	Name of Fan	Rear Fan
FAN_1_STATE	State of Fan	OK:Low OK:Medium OK:High WARN:Max FAIL:Stopped FAIL:ShortCircuit
MODULE COMMS	Faults on the module communications bus	Number of errors on the module bus in the last 20 seconds
VOLTAGE_1_NAME	Name of 1 st Voltage	+7.5V
VOLTAGE_1_STATE	State of 1 st Voltage	OK WARN:Low (Volts < 6.8v) WARN:High (Volts > 8v)
VOLTAGE_1_VALUE	Value of 1 st Voltage	Value in Volts
VOLTAGE_2_NAME	Name of 2 nd Voltage	-7.5V
VOLTAGE_2_STATE	State of 2 nd Voltage	OK WARN:Low (Volts < -8v) WARN:High (Volts > -6.8v)
VOLTAGE_2_VALUE	Value of 2 nd Voltage	Value in Volts

Statistics

This menu can display various errors that may occur within a system.

In the event of a problem these error messages may be quoted to Snell & Wilcox customer support to assist debugging.

Reset Stats

Selecting this function will reset all statistics to zero.

[Active Front Panel:
System - Statistics - Reset Net Stats]

Enable Net Stats

This item must be selected to enable the error counts to be updated.

If this checkbox is not sent all statistics will be displayed as '-'.
[Active Front Panel:

System - Statistics - Enable Net Stats]

Data Length Errors

This counts packets that are an incorrect length.

[Active Front Panel:
System - Statistics - Length Errs]

Destination Errors

This counts packets that have an incorrect destination identifier.

[Active Front Panel:
System - Statistics - Destination Errs]

Source Errors

This counts packets that have an incorrect source identifier.

[Active Front Panel:
System - Statistics - Source Errs]

Packet Type Errors

This counts packets that have an incorrect packet type.

[Active Front Panel:
System - Statistics - Bad Packet Errs]

Routing Errors

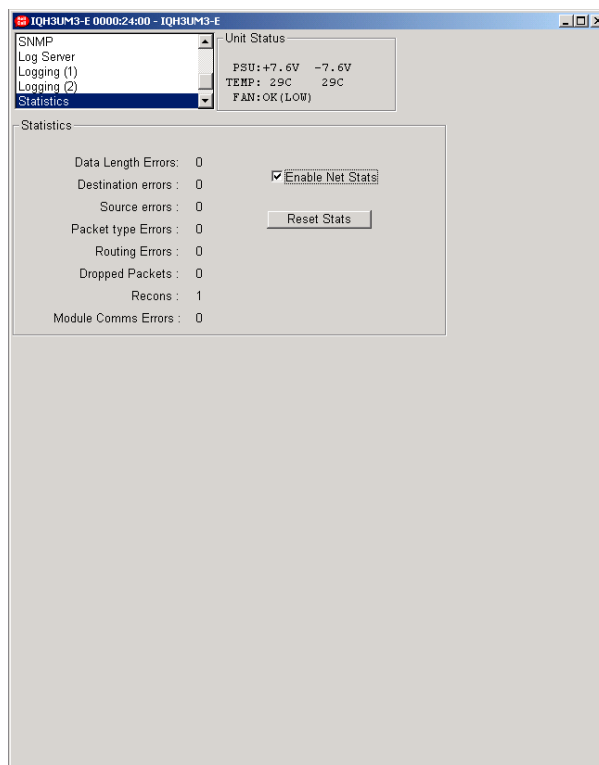
This counts packets that cannot be routed to the indicated destination.

[Active Front Panel:
System - Statistics - Routing Errs]

Dropped Packets

This counts packets that cannot be delivered.

[Active Front Panel:
System - Statistics - Packet Drops]



Recons

This counts network reconfigurations.

Network reconfigurations are normal events when units join or leave the network. They may also occur occasionally due to electrical interference.

Constant reconfigurations indicate a physical fault. Possible faults include.

- Faulty T piece or cable
- Missing termination(s)
- Incorrect value of termination(s)
- Clash of a RollCall Address
- Network cable length exceeded*
- Number of unit loads per segment exceeded*

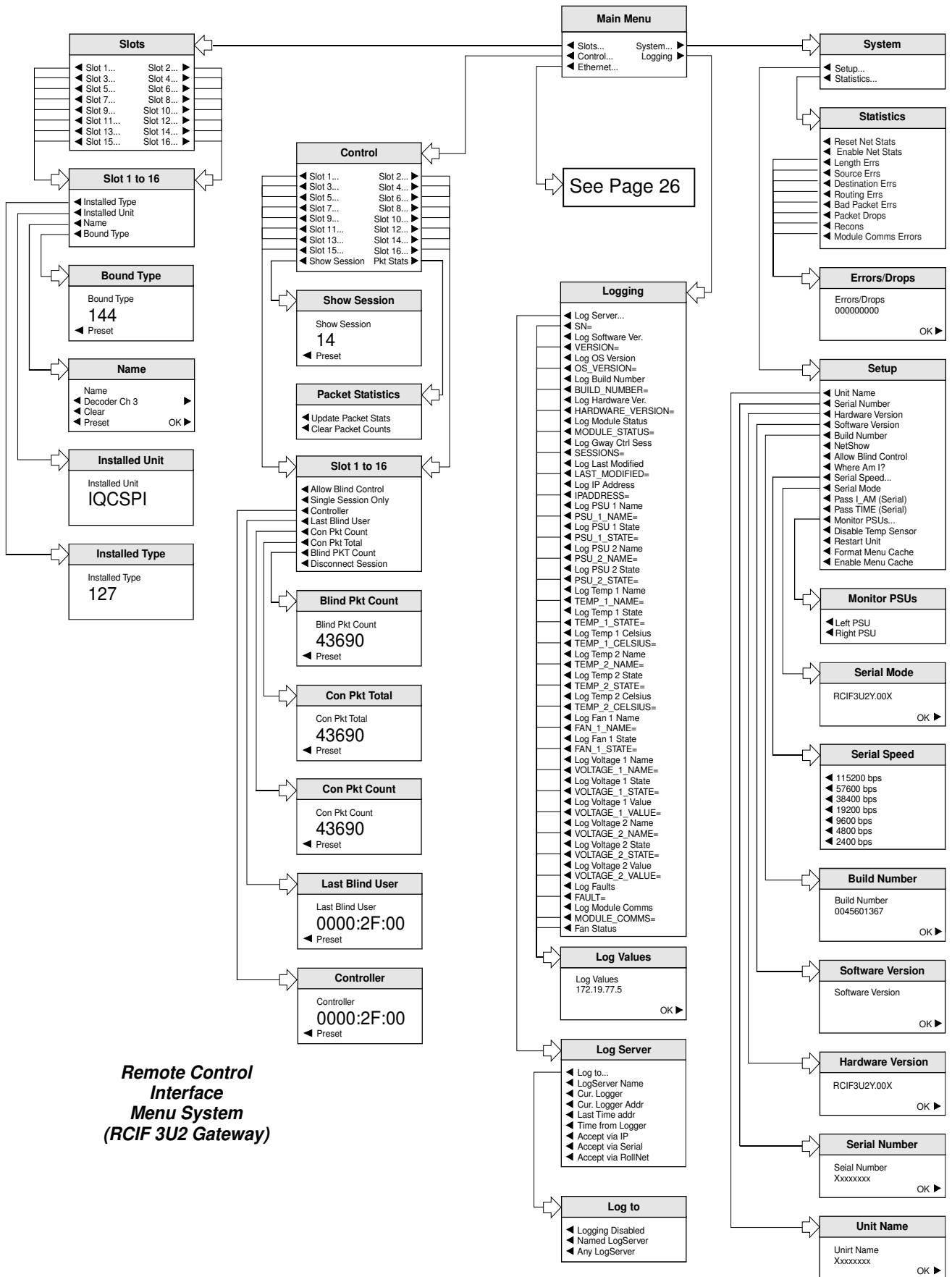
*Please refer to *RollCall System Integrators Manual*.

[Active Front Panel:
System - Statistics - Recons]

Module Comms Errors

This counts errors on the I2C bus.

[Active Front Panel:
System - Statistics - Module Comms Errors]



Remote Control Interface Menu System (RCIF 3U2 Gateway)

