

IQH1S 1U Enclosure

IQ Modular Enclosure

Installation Manual

© November 2006

www.snellwilcox.com

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

For General Enquiry's contact: Tel: +44 (0) 2392 489000 Fax: +44 (0)23 9245 1411

For Technical assistance contact: Tel: +44 (0) 2392 489058 Fax: +44 (0) 2392 489057

Web: <http://www.snellwilcox.com/support> Ftp: <ftp://ftp.snellwilcox.com/support>

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



Service 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.

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)



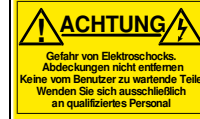
- ⚠ Attention si l'appareil a 2 alimentations, s'assurer que les cordons soient branchés sur la même phase.

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



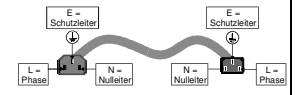
Die angeführten Service-/Reparatur-Anweisungen sind ausschließlich von qualifiziertem Service-Personal auszuführen. Um das Risiko eines lektroschocks zu reduzieren, führen Sie ausschließlich die im Benutzerhandbuch eschriebenen Anweisungen aus, es sei denn, Sie haben die entsprechende Qualifikation.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

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. 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.

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 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.

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.
- Vägguttaget som strömförsörjer apparaten bör finnas i närheten samt vara lättillgänglig.

Strömkontakter i länder utanför USA

Apparaten utrustas normalt med en strømkabel med standard IEC gjuten hankontakt 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 strømkablarna 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 nolllaiitännän 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 suojamaajohtoin E-napaan
SININEN nolllajohtoin N-napaan
RUSKEA vaihejohtoin L-napaan



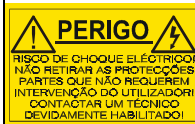
- ⚠ Huom! Jos laitteessa on kaksi verkkojännitteen tuloliitäntää, niiden johdot on liitettävä verkkopistorasioihin, joissa on sama vaiheistus.

Símbolos 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:

- 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



- Αυτό το σύμβολο παραπέμπει το χρήστη σε σημαντικές πληροφορίες που συμπεριλαμβάνονται στο συνοδευτικό εγχειρίδιο.
- Αυτό το σύμβολο υποδεικνύει ότι στο εσωτερικό υψίζονται επικίνδυνες ηλεκτρικές τάσεις. Στο εσωτερικό δεν υπάρχουν επισκευασµα 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 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 καθαρισμένες 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 Αγωγός)
- ΚΑΦΕ καλώδιο συνδέεται στο L (Αγωγός Φάσης)



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

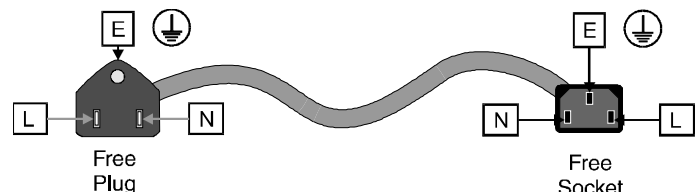
Products employing Lithium batteries

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.
-



Caution Ensure that both power cords are plugged into mains outlets operating from the same phase



Safety Standards

The IQH1S Enclosure conforms to the following standards:

EN60950: 2000

Safety of Information Technology Equipment.

cULus Listed

Professional Video Equipment File No. E193966

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

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 Installation of the IQH1S 1U Enclosure and is intended for use by trained engineering staff.

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:

- IQH1S Enclosure - 1U modular enclosure

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 unauthorised 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:

- IQH1S 1U Enclosure
- Power cable
- CD containing Installation and Operation Manual

Software Version Amendments

Notes about Versions Fitted

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	Installation	
	Power Connections	1.1
	Opening and Closing the front panel.....	1.1
	Power On/Off switch.....	1.2
	Front panel Connections	1.2
	Communication Connections	1.3
	Hex switches and indicators.....	1.3
	Installing/Removing a Module	1.5
	Control Panels.....	1.7
	The RollCall Communications System and Computer Control System	1.7
2	Specifications	

Product Support Procedure

If you experience any technical or operational difficulties with a Snell & Wilcox product please do not hesitate to contact us or utilize our online form to request assistance.

There is a lot of information you can give us that will enable us to diagnose your problem swiftly. Please read the following guidelines, as these suggestions will help us to help you.

Basic Information

For Units Please provide the exact product Model, unit Serial Number and Software Version information.

For Cards or Modules . Please provide the Sub-Assembly Number, card Serial Number and the Software Version information.

Basic Application

Inputs Please provide full details of the Input Signals being used including any references etc. and where they are being generated.

Outputs Please provide full details of the Output Signals required and how they are being monitored.

System Please provide a brief description of the system in which your S&W equipment is currently being used.

Basic Tests

Preset Unit Please use the Preset Unit function to return the settings back to the factory default.

RollCall Is your unit currently connected to a RollCall capable PC? This software is obtainable for free and provides a very user friendly GUI for virtually all S&W equipment - perfect for complex products, large systems or those with passive front panels.

Card Edge Info. What is the status of the card edge LEDs or display? These can often provide information such as power status and input detection conditions.

Internal TPG Many S&W products have an internal test pattern/tone generator. Please activate this to assist you with your problem analysis.

In addition to the above, please do not forget to provide us with all of the necessary contact information:

- Names
- Telephone & Fax numbers
- e-mail addresses
- Business address

A form has been provided for this information and will be found on the next page or an on-line form is available on the Snell & Wilcox website at:

<http://www.snellwilcox.com/support/request>

Product Support Request Form

Name: *		
Company:		
Address Details: *		
Post/ZIP Code:		
Country: *		
Telephone: *		
Fax:		
Email: *		
Local S&W Center: *		
Product Name: *		
Product Type: *	Switchers (i.e. Magic DaVE, Switchpack, Kahuna)	
	File & Data Transfer Products (i.e. RollCall, Memphis & Asteroid)	
	Video Products (i.e. Modular, Kudos Plus and Alchemist)	
Unit Serial Number: *		
Fault/Spare Part Information: * (please advise us how many units show this fault and the system layout showing all other manufacturers' products)		
* Preferred Method of Contact:	e-mail	
	Phone	

- Item is required.

Please mail to: Snell & Wilcox Ltd., Southleigh Park House, Eastleigh Road, Havant, Hants, PO9 2PE. United Kingdom.	Service Contact Information: Tel: +44 (0) 2392 489058 Fax: +44 (0) 2392 489057 http://www.snellwilcox.com/support ftp://ftp.snellwilcox.com/support
--	---

Manual Revision Record

Date	Version No.	Issue No.	Change	Comments
030403	1	1		First Issue released
090605	1	2	Reference to Module power label removed from page 1.6 and power to 60 W pages 1.6 & 2.1	Complete new manual issued
041006	1	3	For new software	New issue released
231106	1	4	Page 1.5 LED status data added	New issue released

Installation

Important Installation Notice

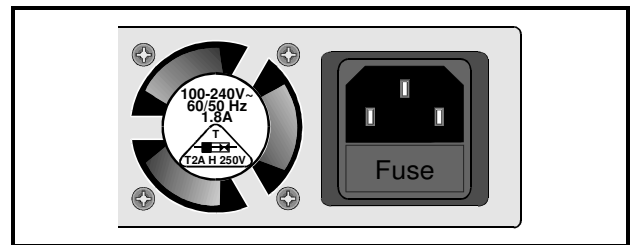
To fully conform with EMC standards modules must be correctly installed in the mainframes paying particular attention to the following:

1. A modular card must only be plugged into a rear connection panel specifically designed for that module
2. The rear of the mainframe must have a full complement of rear panels. Any vacant slots must have a blank rear panel fitted
3. All mainframe covers and rear panels must be fitted and screwed down using all available fixing holes
4. The mainframe front panel must be in the closed position

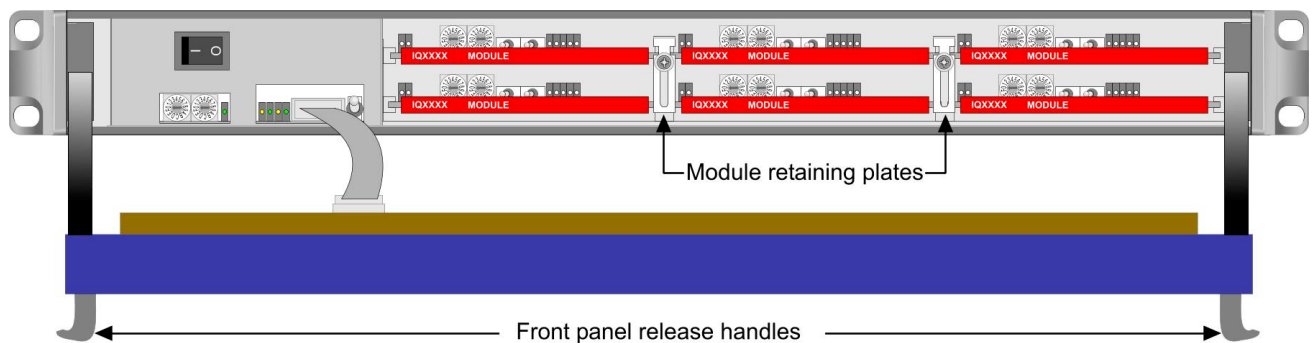
1U MAINFRAME

POWER CONNECTIONS

This is the IEC320 mains power connector suitable for a standard IEC type power cable and contains a 2A (T) HBC 250 V fuse. If a fused type plug is fitted to the cable a fuse of 7A rating should be installed.



OPENING AND CLOSING THE FRONT PANEL



To Open

Release the front panel by pulling the front panel forward and downwards using the release handles on either side of the front panel.

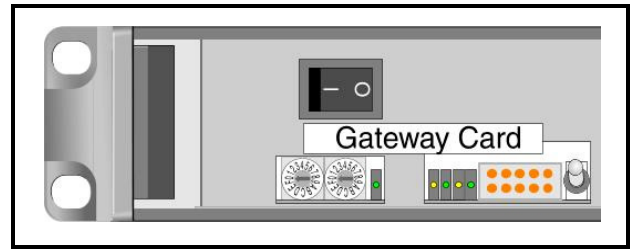
To Close

Replace the front panel by pushing the front panel rearwards and upwards using the release handles on either side of the front panel. Ensure that the panel is fully seated in the case.

POWER ON/OFF SWITCH

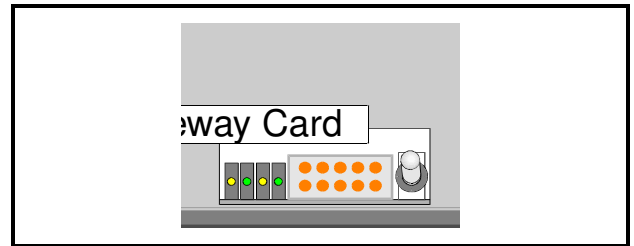
The power ON/OFF switch is located behind the drop-down front panel in the left-hand corner.

Power ON will be indicated by the illumination of the LED on the front panel.



FRONT PANEL CONNECTOR

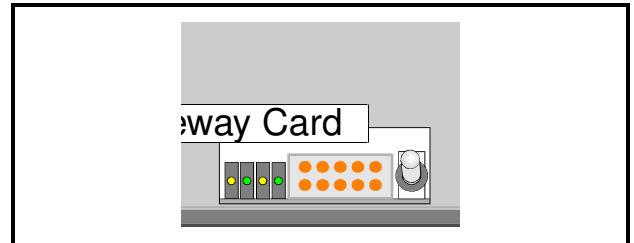
When an active control panel is fitted to the unit, this connector carries the communication signals between the mainframe and the front panel.



COMMUNICATIONS MODE SWITCH

This toggle switch allows the type of communication signal used for the rear panel 'D' connector, to be selected.

The switch should be in the UP position to use RollCall 485 and in the DOWN position to use RS422(PC) interface signals.



COMMUNICATION CONNECTIONS

Remote

This 9 pin 'D' connector on the rear panel allows the unit to be connected to the RollCall 485 network communications system.

Note that RS485 interconnections should be pin to pin and only be used for Snell & Wilcox RollNet applications.

This connector may also be used as a RS422 port.

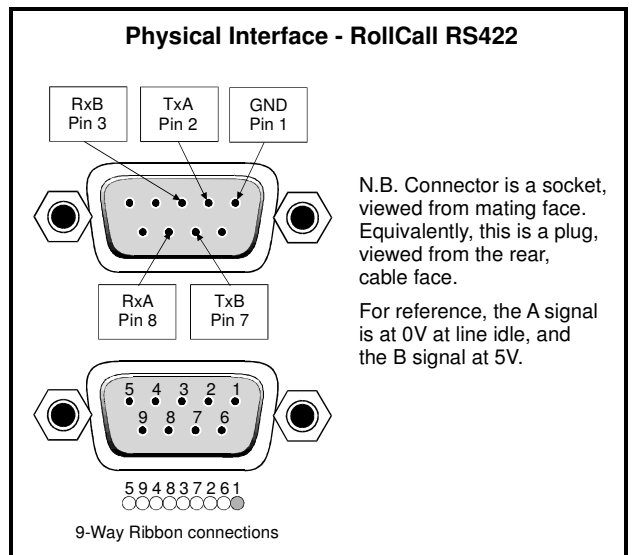
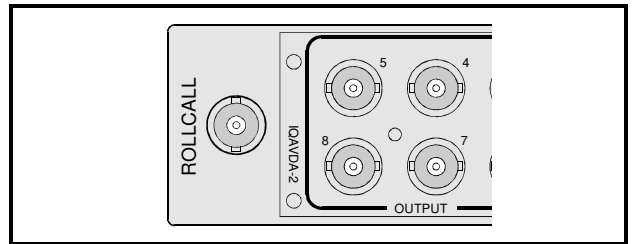
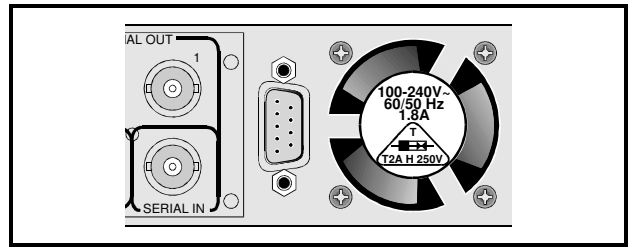
RollCall

This BNC connector allows the unit to be connected to the RollCall network communications system.

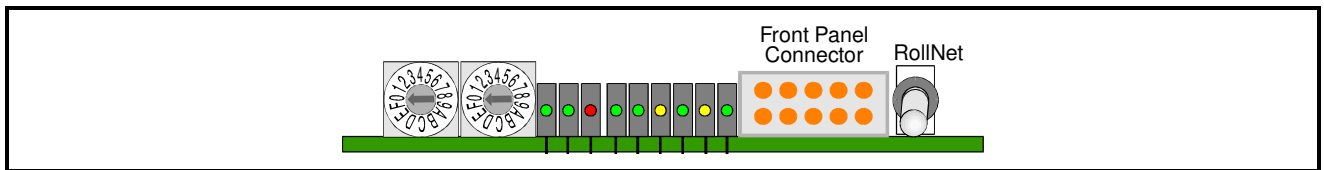
The RollCall system should be connected using 75 Ohm "T" pieces in a similar manner to an "Ethernet" system. Both extremities of the system must be terminated in 75 Ohms.

Note that in a RollCall™ segment, all units must have different unit address codes.

Note: The coaxial link is bi-directional and therefore must not be passed through signal switching networks. Also, to allow hum and noise cancellation the screen of the coaxial connection must not be earthed.

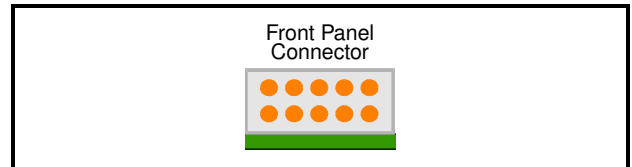


THE GATEWAY CARD



FRONT PANEL CONNECTOR

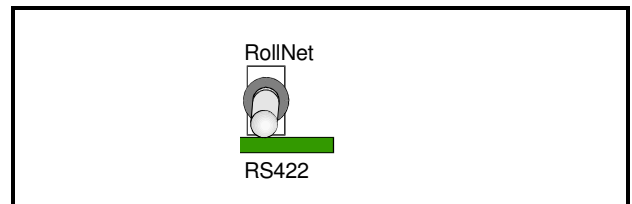
When an active control panel is fitted to the unit, this connector carries the communication signals between the mainframe and the front panel.



COMMUNICATIONS MODE SWITCH

For operation of the RS422 serial port this switch must remain in the DOWN position.

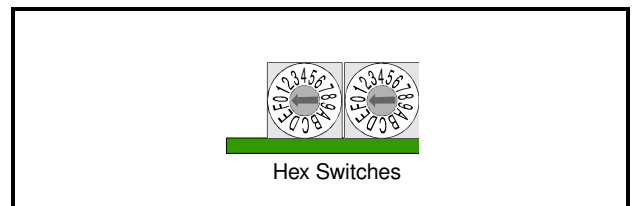
For operation of the RollNet port this switch must remain in the UP position.



HEX SWITCHES

Both of these switches are used to define the Unit Address for the equipment. They are only read at power-up.

Position `0' on the left hand switch will disable the RollCall™ function on the unit; all other positions on these switches may be used to set the Unit Address in Hex. (Left hand switch 1 to f, right hand switch 0 to f)



If an address is already in use the RollCall™ receive and transmit LED's will flash alternately at a 1 second rate.

The unit must then be powered-down, a unique address selected and the unit powered-up again.

Note that the Shoebox active front panel has a separate and different address to the Gateway.

The Gateway address can be set to zero, (which will disable RollCall function) and all features of the shoebox will still work *except* for the RS422 port.

Therefore if the RS422 port of the shoebox is not needed, the second address may be saved by setting the gateway to zero.

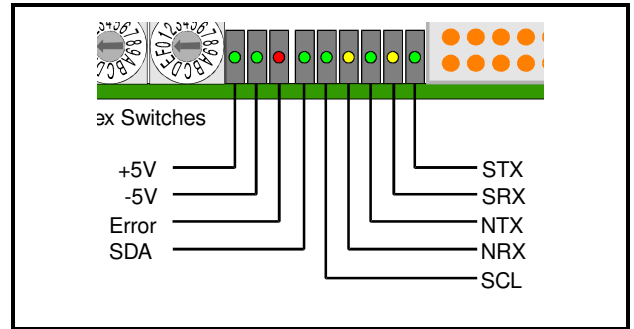
The front panel will still have an address if it needs to be used.

Note that in a RollCall™ segment, all units must have different unit addresses.

For more information see RollCall™ section.

LED INDICATORS

- +5V This green LED indicates that the +5V supply is present.
- 5V This green LED indicates that the -5V supply is present.
- Error This red LED indicates that the processor is running outside of its normal operational parameters.
Note that this LED will flash during startup.
- SDA This green LED will flash indicating I²C backplane data line activity.
- SCL This green LED will flash indicating I²C backplane clock activity.
- NRX This yellow LED will flash indicating data is being received via the RollNet connection.
- NTX This green LED will flash indicating data is being transmitted via the RollNet connection.
- SRX This yellow LED will flash indicating data is being received via the RS422 connection.
- STX This green LED will flash indicating data is being transmitted via the RS422 connection.

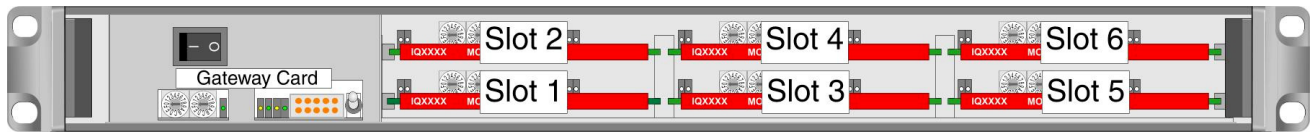


LED Status Information

LED	Continuously ON	OFF	Flashing
+5V	Normal +5V supply OK	+5 V Power Supply Failure	N/A
-5V	Normal -5V supply OK	-5 V Power Supply Failure	N/A
Error	Error - Gateway software not running	Normal – Software cleared during operation	Error - Software constantly rebooting (Watchdog)
SDA	Error - Backplane data line error	Normal - I ² C backplane data line idle	Normal – Indicates backplane data line activity
SCL	Error - Backplane clock line held Low	Normal - I ² C backplane clock line idle	Normal – Indicates backplane clock line activity.
NRX	N/A	Normal – data line idle	Normal – Indicates data is being received via the RollNet connection.
NTX	N/A	Normal – data line idle	Normal – Indicates data is being transmitted via the RollNet connection.
SRX	N/A	Normal – data line idle	Normal – Indicates data is being received via the RS422 connection.
STX	N/A	Normal – data line idle	Normal – Indicates data is being transmitted via the RS422 connection.

INSTALLING/REMOVING A MODULE

Internal View of 1U Mainframe.



Rear of 1U Mainframe fitted with two double width Modules and two single width Modules



Warning

Before installing a new module into the enclosure the *Configuration Rules* given below must be followed.



The rear of the enclosure must have a full complement of rear panels. Any vacant slots must have a blank rear panel fitted

Configuration Rules

These rules limit the total power dissipation of modules that can be installed in the box. Use the module power ratings to calculate the total power dissipated in the enclosure.

Module Power Rating

The power rating for each module is given in its associated operation manual.

Available Power

The IQH1S Enclosure has 60 W of available power. The power ratings of each module should be added together and the total should not exceed 60 W.

The table opposite may be used for this calculation.

Warning

The sum of the module power ratings (calculated using the method above) in the enclosure must not exceed 60 W.

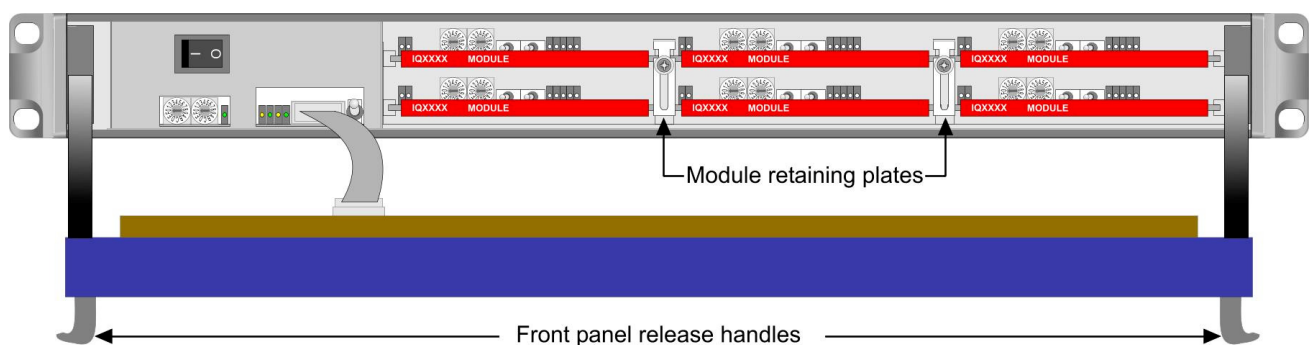
Power Rating Table

Slot Position	Module Name	Power Rating
1		
2		
3		
4		
5		
6		
Total Power (Watts) (60 W Maximum)		

Installing a New Module

Warning Ensure that the power supply is switched OFF and the mains power connection at the rear of the unit is removed before these operations are attempted.

1. Before installing a new module consult page 1.5 “*Installing/Removing a Module*” to ensure there is adequate power available for the module to be added.
2. Release the front panel by pulling the front panel forward and downwards using the release handles on either side of the front panel.



3. Choose an empty slot position for the module.
4. Loosen the screw securing the appropriate module retaining plate.
5. Slide the module retaining plate upwards or downwards as appropriate to uncover the card entry slots.
6. At the rear of the enclosure remove the screws securing the blanking plate associated with the chosen slot position.
7. Store the blanking plate in a safe place for future use.
8. Ensuring correct orientation fit the rear connecting panel (supplied with the new module) to the rear of the enclosure in the vacant aperture and secure with the fixing screws provided.
9. At the front of the enclosure, (ensuring correct orientation) carefully slide in the new module until it fully mates with the rear connector panel.
10. Slide the module retaining plate upwards or downwards as appropriate to cover the card entry slots.
11. Tighten the screw securing the module retaining plate.
12. Replace the front panel ensuring that the panel is fully seated in the case.
13. Update the Power Rating table on page 1.5.

Removing a Module

1. Remove the front panel as previously described
2. Loosen the screw securing the appropriate module retaining plate.
3. Slide the module retaining plate upwards or downwards as appropriate to uncover the card entry slots.
4. Carefully slide out the desired module

If a different type of module is to be installed in this position proceed as in ***Installing a New Module*** item 1 and items 4 to 14.

If the slot is to left vacant, proceed as follows:

1. Tighten the screw securing the module retaining plate.
2. Replace the front panel ensuring that the panel is fully seated in the case.
3. At the rear of the enclosure fit the blanking plate in the associated position using two screws.
4. Update the Power Rating table on page 1.5.

Control Panels

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

1. Locally, by use of an active front panel (the control panel) for the 1U system
2. Remotely, by use the same control panel as in (1) above, connected by a single cable assembly
3. Remotely, from any number of control panels (1U), connected via the RollCall communications network
4. Remotely, from any number of PC's connected via the RollCall communications network
5. Preset controls and switches are provided on the card edge of each module, accessible behind the drop-down front panel.

The RollCall Communications System and Computer Control System

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

The RollCall command protocol derives control panel operating software 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.

For modules with the RollCall option fitted all card edge control functions are available on the remote control panel or any other controlling device. For some module cards additional control functions and readouts will be available to the RollCall panel but will not be accessible via the card edge controls.

Note that for some modules if any of the preset switches mentioned above are set to the ON position, it will not be possible for the function to be disabled by the remote control mechanism. Under these circumstances a message will be displayed on the active remote control panel indicating that control is not available. To avoid this situation it is recommended that all card edge preset switches be set to the OFF position.

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 the non-volatile memory of the module's dedicated Control Processing Unit under the control of RollCall. 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 yet powerful remote control system. The units in the system are joined via a high-speed network and each box enclosure (including active front panels) is a node on the network. A single network can have a maximum of 240 nodes with any combination of control panels and modular rack boxes. With the 3U box holding up to 16 cards, the system can accommodate 3840 (240 x 16) cards. Each box is physically addressed via switches on the Remote Control Interface.

Network bridges can be used to connect any network to up to 15 others nested up to 4 levels. A single controller can access up to 54241 ($1 + 15 + 15^2 + 15^3 + 15^4$) networks containing up to a total of 208 million $(3840-16) \times 54241$ IQ modules.

The RollCall network has three interface connections on each IQ enclosure:

1. 75 Ohm coaxial BNC for box-to-box connections running at 2.5 Mb/s.
2. RS485 9 way 'D' connector for internal bus connections such as to front panels running at 2.5 Mb/s.
3. 38.4 Kb/s asynchronous RS422 port for binary and ASCII terminal access for third party equipment.

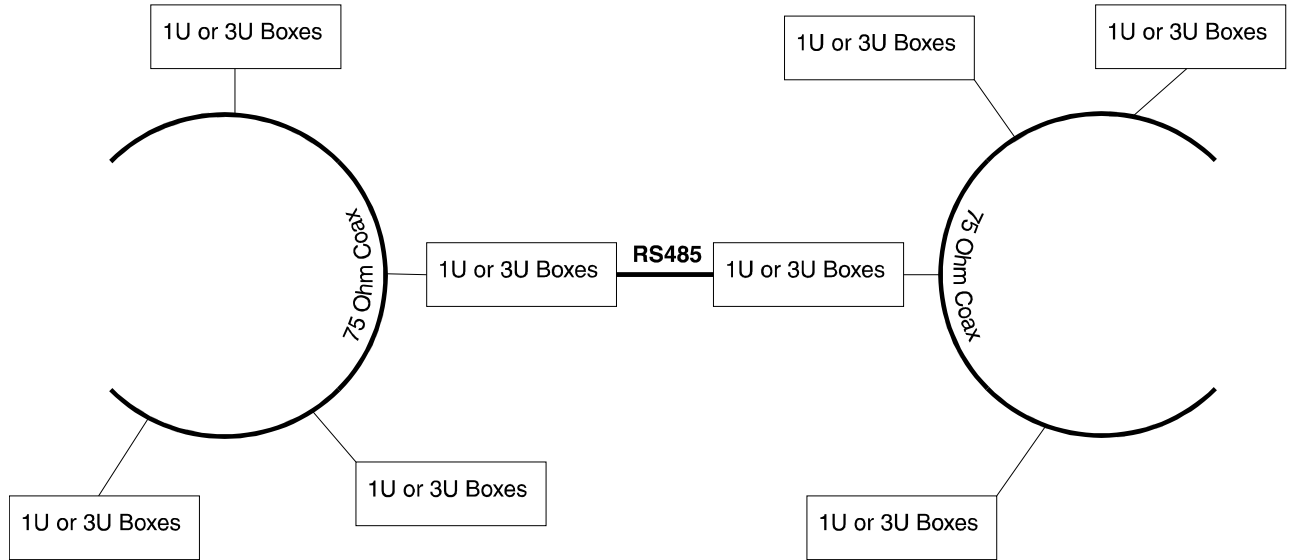
The RS422 and RS485 interfaces share the same D connector. Selection of the interface format is by a switch on the Remote Control Interface.

The primary connection interface will be the coaxial network. Each section can support up to 64 unit loads at lengths of up to 400 metres. The following is a table of unit loads for each type of equipment.

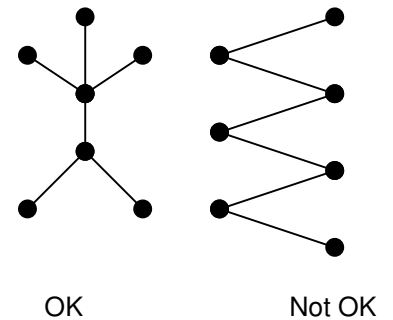
Equipment	Unit loads
1U ShoeBox + front panel	4
1U box (up to 6 single width modules)	4
3U box (up to 16 modules with removable Gateway card.)	2
Stand alone unit (Supervisor, MDD, Golden Gate)	2
PC Remote module	1

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.



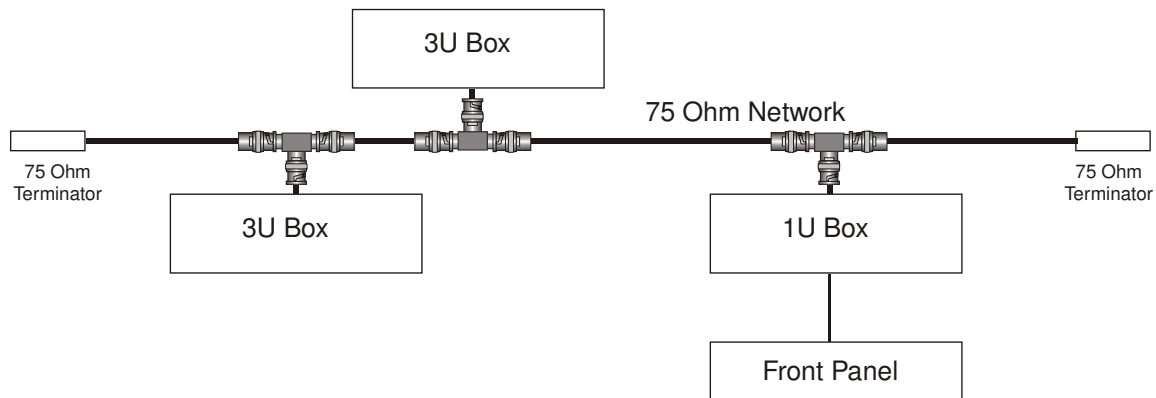
The maximum number of hub transitions between any number of nodes is 6.



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 400m.

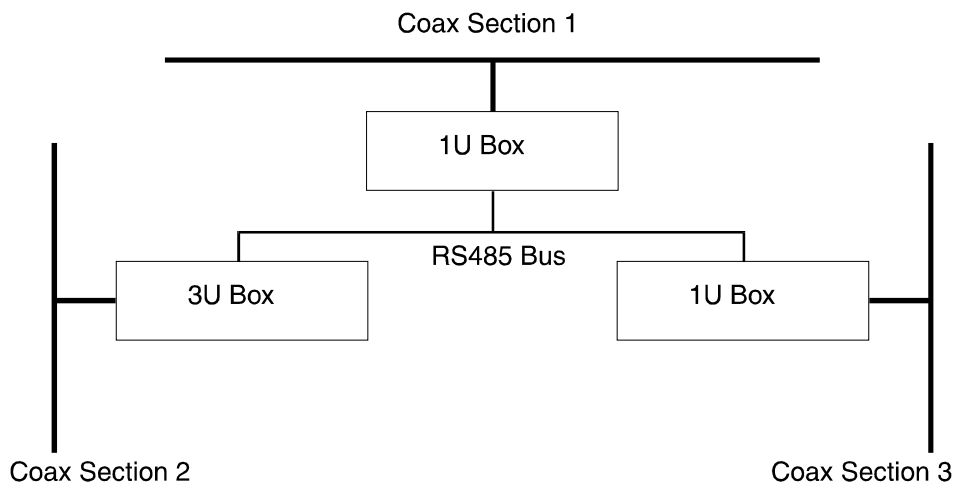
Example configuration:



RS485 Differential Interface

This interface allows bus connections to internal pieces of equipment such as front panels. It is a multi-drop differential bus with a data rate of 2.5 Mb/s. The data format used on this bus is identical to that used on the coaxial network, hence can provide a natural hub between coaxial sections.

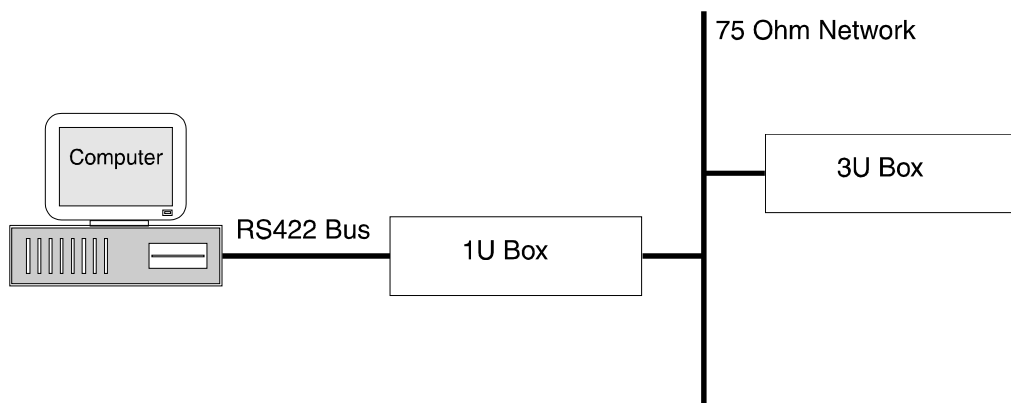
Example configuration:



RS422 Asynchronous Interface

This interface is specifically designed for third party connections into the system and runs at 38.4 Kb/s. This allows PC's or any other serial device access to any of the units within the system. Every active 1U or 3U box has one of these ports. The port operates in binary mode: formatted packet data is sent to the port using STX and ETX characters.

Example configuration:



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

Technical Profile

Features

Inputs/Outputs

RollCall™ Remote Control..BNC connector

RS422/485 Remote Control9-pin D-type connector

Active Front Panel Controls

Dedicated Push Buttons for:Home; Previous; Return; Modules;
Lock; Setup; Save; Recall; Display
Select; Menu Text Select;
Spinwheel for menu control

Preset Controls

Unit address code set switches

2 Hex switches 0 to F

Communications mode switch

Select RollCall™ 485 or RS422
interface

Additional Controls via RollCall™ Remote Control System

Full Control via active front panel

Specifications

Number of Modules that may be accommodated:

3 double width or 6 single width (or
combinations of both) fitted
horizontally

Module card dimensions.....100 mm wide, 340 mm long.

Module rear connector.....64 way

Module rear panel dimensions

103.4 mm wide, 40.4 mm (double
width)
20 mm (single width) high.

CE Performance Information

EnvironmentCommercial and light industrial E2

Peak Mains Inrush Current following a 5 second mains
interruption
18.7 A peak at 0°

Power

Input Voltage Range 100 - 240 V 50/60 Hz

Input Connector IEC320 Fused 2 A(T)

Power Switch..... Behind drop-down front panel

Input Current..... 1.8 A maximum

Modules Power Dissipation 60 W maximum

Output..... +7.5 V and -7.5 V ± 5%

Note that all modules have built-in power supply fuses.

Mechanical

Temperature Range..... 0 to 40° C operating, -30 to +75°
storage. Cooling fan is fitted.

Case Type 1U rack mounting steel case

Dimensions..... 483 mm x 455 mm x 44.4 mm (w,
d, h)

Depth behind rack ears excluding space for leads
415 mm

Weight Approximately 5kg. without
modules

IQH1S 1U Enclosure

IQ Modular Enclosure

Operator's Manual

© November 2006

www.snellwilcox.com

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

For General Enquiry's contact: Tel: +44 (0) 2392 489000 Fax: +44 (0)23 9245 1411

For Technical assistance contact: Tel: +44 (0) 2392 489058 Fax: +44 (0) 2392 489057

Web: <http://www.snellwilcox.com/support> Ftp: <ftp://ftp.snellwilcox.com/support>

Explanation of Safety Symbols



- 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.

Explanation of Safety Symbols



- 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.

Légende :



- 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.

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

ACHTUNG

Gefahr von Elektroschocks. Abdeckungen nicht entfernen. Keine vom Benutzer zu wartende Teile. Wenden Sie sich ausschließlich an qualifiziertes Personal.

Die angeführten Service-/Reparatur-Anweisungen sind ausschließlich von qualifiziertem Service-Personal auszuführen. Um das Risiko eines Elektroschocks zu reduzieren, führen Sie ausschließlich die im Benutzerhandbuch beschriebenen 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 austauschen müssen, entsorgen Sie diesen bitte umgehend. Die farbliche Belegung des Netzkabels ist wie folgt:



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

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:

ATTENZIONE

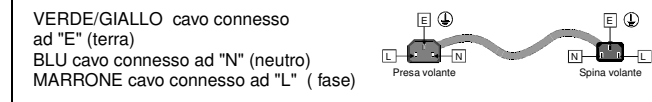
RISCHIO DI SHOCK ELETTRICO. NON CERCARE DI SMONTARE L'UNITÀ PER QUALSIASI TIPO DI INTERVENTO. RIVOLGERSI AL PERSONALE QUALIFICATO.

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:



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.

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

ADVERTENCIA

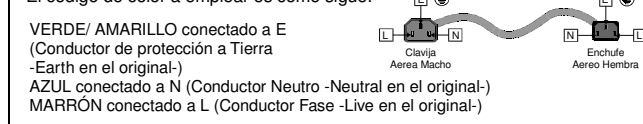
RIESGO DE CHOQUE ELECTRICO. NO QUITAR LAS PROTECCIONES ELEMENTOS NO ACCESIBLES AL USUARIO. SERVICIO SOLAMENTE A PERSONAL CUALIFICADO.

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:



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

CAUTION

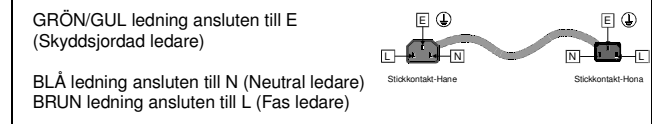
RISK OF ELECTRIC SHOCK. DO NOT REMOVE COVERS. NO USER SERVICEABLE PARTS. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

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:



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

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 lederen er som følger:

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



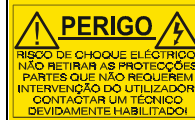
- ⚠ Forsigtig Hvis enheden har to lysnetindgange, skal der sørges for at begge ledninger tilsluttes lysnetudgange fra den samme fase.

Símbolos de Segurança

P

- ⚠ O símbolo triangular avverte 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:

Condutor VERDE/AMARELO ligado a E (Terra)
Condutor AZUL ligado a N (Neutro)
Condutor 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.

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 SUOJAMAALITÄNTÄ (⊕) ja nollaliitännän 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 nollajohdin N-napaan
RUSKEA vaihejohdin L-napaan



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

Επεξήγηση των Συμβόλων Ασφαλείας



Αυτό το σύμβολο περικλείεται 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 εκτελείτε επισκευές πέρα από 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 **μη** 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 (PE) 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 συνδέεται 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 βερβαιωθείτε 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.

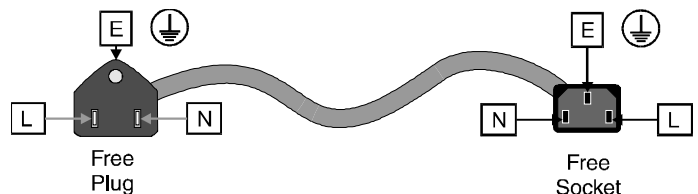
Power cable supplied for the USA

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 IQH1S Enclosure conforms to the following standards:

EN60950: 2000

Safety of Information Technology Equipment.

cULus Listed

Professional Video Equipment File No. E193966



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

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 Installation of the IQH1S 1U Enclosure and is intended for use by trained engineering staff.

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:

- IQH1S Enclosure - 1U modular enclosure

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 unauthorised 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:

- IQH1S 1U Enclosure
- Power cable
- CD containing Installation and Operation Manual

Software Version Amendments

Notes about Versions Fitted

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 and Features

Description	1.1
Features	1.1

2 Specifications

3 Installation

Important Installation Notice.....	3.1
Power connections.....	3.1
Power on/off switch.....	3.1
Front panel connector	3.1
Communications mode switch	3.1
Communication connections.....	3.2
The Gateway card.....	3.3
Front panel connector	3.3
Communications mode switch	3.3
Hex switches	3.3
LED indicators.....	3.4
Control Panels.....	3.5
The RollCall Communications System and Computer Control System.....	3.5
RollCall Network System Details	3.6
RollNet RS485 Differential Interface.....	3.7
75 Ohm Coaxial Interface	3.7
RS485 Differential Interface	3.8
RS422 Asynchronous Interface.....	3.8

4 Operation

1U ACTIVE CONTROL PANEL	4.1
GENERAL INFORMATION.....	4.1
The Menu System.....	4.1
THE LCD DISPLAY WINDOWS	4.2
LED Indicators	4.4
Dedicated Push Buttons	4.4
CONTROL SYSTEM OVERVIEW	4.7
Front Panel Setup via the Front Panel Menu System.....	4.8
SETUP MENU SYSTEM.....	4.9
Front Panel Setup via the RollCall Control Templates.....	4.14
Control.....	4.14
Setup.....	4.16
RollCall Control Templates for the IQHS1U Enclosure RCIF	4.17
Control.....	4.17
Slots	4.19
Setup.....	4.22
Log Server.....	4.25
Logging	4.26
Logging Fields.....	4.27
Statistics.....	4.29
IQH1S Enclosure RCIF Setup via the Front Panel Menu System	4.30
GENERAL INFORMATION.....	4.31
RCIF Menu Details	4.31
Slots	4.31
Statistics.....	4.32
Logging	4.33
System/Setup.....	4.35
Control.....	4.37
Menu System - 1U Enclosure Configured as a Shoebox.....	4.39

Product Support Procedure

If you experience any technical or operational difficulties with a Snell & Wilcox product please do not hesitate to contact us or utilize our online form to request assistance.

There is a lot of information you can give us that will enable us to diagnose your problem swiftly. Please read the following guidelines, as these suggestions will help us to help you.

Basic Information

For Units Please provide the exact product Model, unit Serial Number and Software Version information.

For Cards or Modules . Please provide the Sub-Assembly Number, card Serial Number and the Software Version information.

Basic Application

Inputs Please provide full details of the Input Signals being used including any references etc. and where they are being generated.

Outputs Please provide full details of the Output Signals required and how they are being monitored.

System Please provide a brief description of the system in which your S&W equipment is currently being used.

Basic Tests

Preset Unit Please use the Preset Unit function to return the settings back to the factory default.

RollCall Is your unit currently connected to a RollCall capable PC? This software is obtainable for free and provides a very user friendly GUI for virtually all S&W equipment - perfect for complex products, large systems or those with passive front panels.

Card Edge Info. What is the status of the card edge LEDs or display? These can often provide information such as power status and input detection conditions.

Internal TPG Many S&W products have an internal test pattern/tone generator. Please activate this to assist you with your problem analysis.

In addition to the above, please do not forget to provide us with all of the necessary contact information:

- Names
- Telephone & Fax numbers
- e-mail addresses
- Business address

A form has been provided for this information and will be found on the next page or an on-line form is available on the Snell & Wilcox website at:

<http://www.snellwilcox.com/support/request>

Product Support Request Form

Name: *		
Company:		
Address Details: *		
Post/ZIP Code:		
Country: *		
Telephone: *		
Fax:		
Email: *		
Local S&W Center: *		
Product Name: *		
Product Type: *	Switchers (i.e. Magic DaVE, Switchpack, Kahuna)	
	File & Data Transfer Products (i.e. RollCall, Memphis & Asteroid)	
	Video Products (i.e. Modular, Kudos Plus and Alchemist)	
Unit Serial Number: *		
Fault/Spare Part Information: * (please advise us how many units show this fault and the system layout showing all other manufacturers' products)		
* Preferred Method of Contact:	e-mail	
	Phone	

- Item is required.

Please mail to: Snell & Wilcox Ltd., Southleigh Park House, Eastleigh Road, Havant, Hants, PO9 2PE. United Kingdom.	Service Contact Information: Tel: +44 (0) 2392 489058 Fax: +44 (0) 2392 489057 http://www.snellwilcox.com/support ftp://ftp.snellwilcox.com/support
--	---

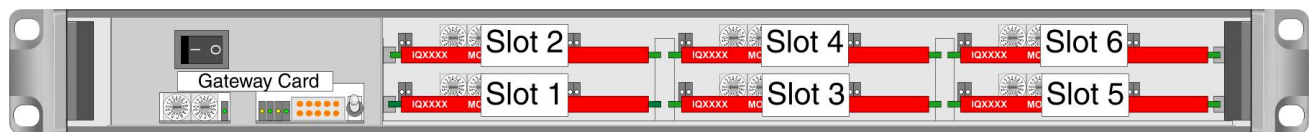
Description

This 1RU enclosure accepts up to 6 single width modules.

It is fitted with a RollCall gateway card and single PSU.

The 'shoebox', containing the Active Front Panel, is designed for fitting into a control desk. However, the 1RU frame can also be fitted with an 'Active Front Panel' to enable remote control if required.

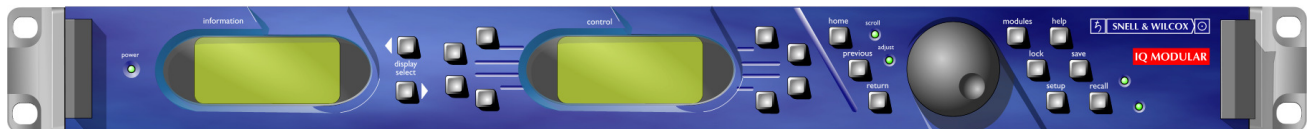
Internal View of 1U Mainframe.



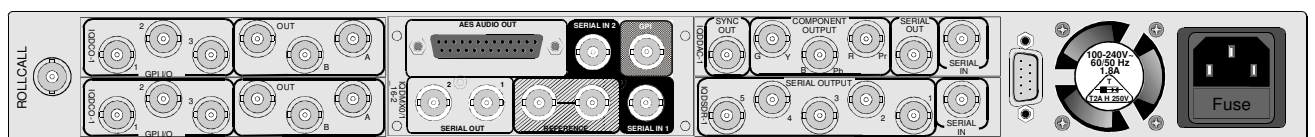
1U Passive Front Panel



1U Active Front Panel



Example of the rear of a 1U Mainframe fitted with six single width Modules



Features

- 1RU rack size, taking up to:
3 double width modules – video or audio
6 single width modules – video only
- Choice of active or blank front panels
- Full EMC compliance
- Internal gateway communications card for RollCall™ and RS422 control.
Can also be used to connect a PC to the RollCall™ 75 ohm BNC network

Technical Profile

Features

Inputs/Outputs

RollCall™ Remote Control..BNC connector

RS422/485 Remote Control 9-pin D-type connector

Active Front Panel Controls

Dedicated Push Buttons for: Home; Previous; Return; Modules;
Lock; Setup; Save; Recall; Display
Select; Menu Text Select;
Spinwheel for menu control

Preset Controls

Unit address code set switches

2 Hex switches 0 to F

Communications mode switch

Select RollCall™ 485 or RS422
interface

Additional Controls via RollCall™ Remote Control System

Full Control via active front panel

Specifications

Number of Modules that may be accommodated:

3 double width or 6 single width (or
combinations of both) fitted
horizontally

Module card dimensions.....100 mm wide, 340 mm long.

Module rear connector.....64 way

Module rear panel dimensions

103.4 mm wide, 40.4 mm (double
width)
20 mm (single width) high.

CE Performance Information

EnvironmentCommercial and light industrial E2

Peak Mains Inrush Current following a 5 second mains
interruption
18.7 A peak at 0°

Power

Input Voltage Range 100 - 240 V 50/60 Hz

Input Connector IEC320 Fused 2 A(T)

Power Switch..... Behind drop-down front panel

Input Current..... 1.8 A maximum

Modules Power Dissipation 60 W maximum

Output..... +7.5 V and -7.5 V ± 5%

Note that all modules have built-in power supply fuses.

Mechanical

Temperature Range..... 0 to 40° C operating, -30 to +75°
storage. Cooling fan is fitted.

Case Type 1U rack mounting steel case

Dimensions..... 483 mm x 455 mm x 44.4 mm (w,
d, h)

Depth behind rack ears excluding space for leads
415 mm

Weight Approximately 5kg. without
modules

Installation

Important Installation Notice

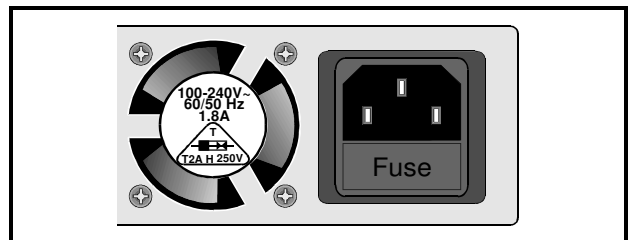
To fully conform with EMC standards modules must be correctly installed in the mainframes paying particular attention to the following:

1. A modular card must only be plugged into a rear connection panel specifically designed for that module
2. The rear of the mainframe must have a full complement of rear panels. Any vacant slots must have a blank rear panel fitted
3. All mainframe covers and rear panels must be fitted and screwed down using all available fixing holes
4. The mainframe front panel must be in the closed position

1U MAINFRAME

POWER CONNECTIONS

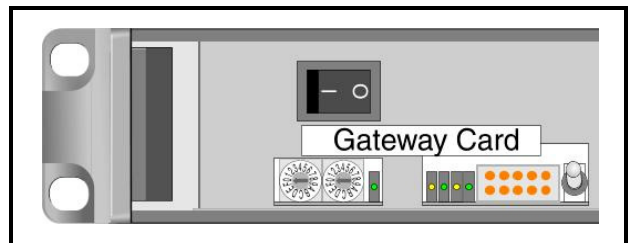
This is the IEC320 mains power connector suitable for a standard IEC type power cable and contains a 2A (T) HBC 250 V fuse. If a fused type plug is fitted to the cable a fuse of 7A rating should be installed.



POWER ON/OFF SWITCH

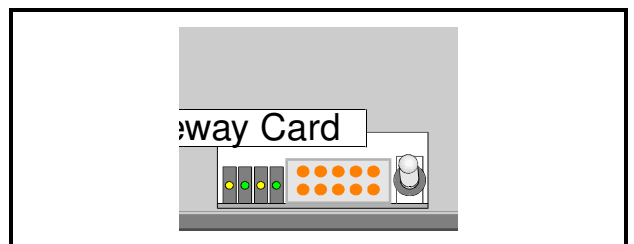
The power ON/OFF switch is located behind the drop-down front panel in the left-hand corner.

Power ON will be indicated by the illumination of the LED on the front panel.



FRONT PANEL CONNECTOR

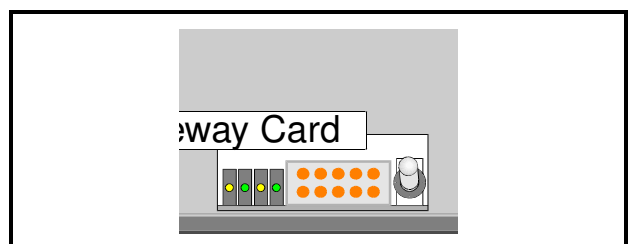
When an active control panel is fitted to the unit, this connector carries the communication signals between the mainframe and the front panel.



COMMUNICATIONS MODE SWITCH

This toggle switch allows the type of communication signal used for the rear panel 'D' connector, to be selected.

The switch should be in the UP position to use RollCall 485 and in the DOWN position to use RS422(PC) interface signals.



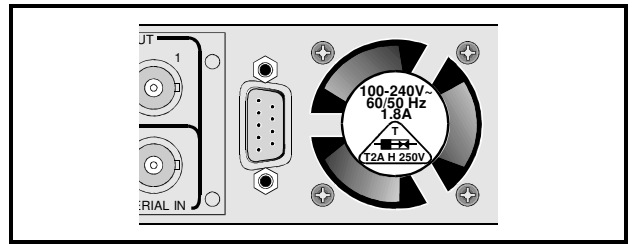
COMMUNICATION CONNECTIONS

Remote

This 9 pin 'D' connector on the rear panel allows the unit to be connected to the RollCall 485 network communications system.

Note that RS485 interconnections should be pin to pin and only be used for Snell & Wilcox RollNet applications.

This connector may also be used as a RS422 port.



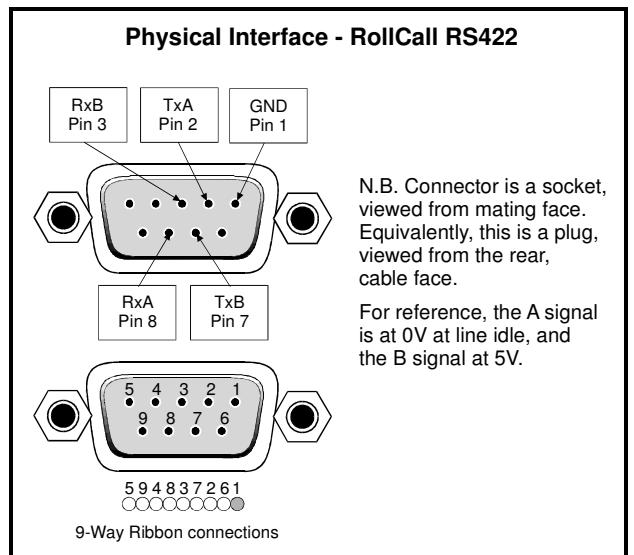
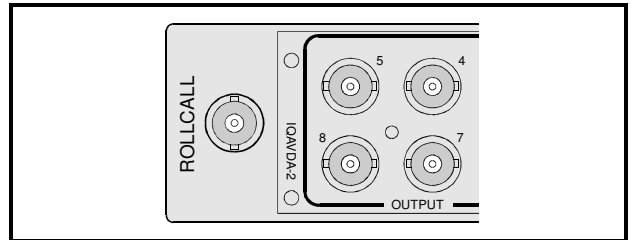
RollCall

This BNC connector allows the unit to be connected to the RollCall network communications system.

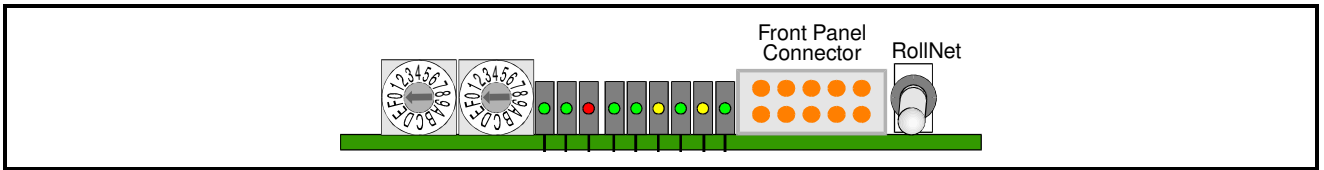
The RollCall system should be connected using 75 Ohm "T" pieces in a similar manner to an "Ethernet" system. Both extremities of the system must be terminated in 75 Ohms.

Note that in a RollCall™ segment, all units must have different unit address codes.

Note: The coaxial link is bi-directional and therefore must not be passed through signal switching networks. Also, to allow hum and noise cancellation the screen of the coaxial connection must not be earthed.

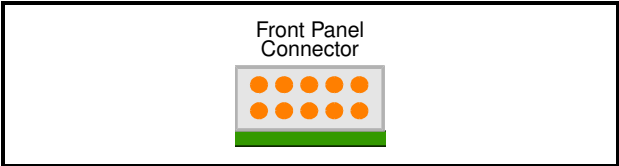


THE GATEWAY CARD



FRONT PANEL CONNECTOR

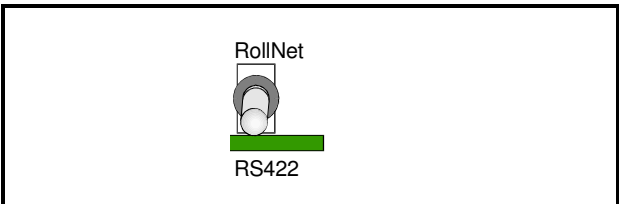
When an active control panel is fitted to the unit, this connector carries the communication signals between the mainframe and the front panel.



COMMUNICATIONS MODE SWITCH

For operation of the RS422 serial port this switch must remain in the DOWN position.

For operation of the RollNet port this switch must remain in the UP position.



HEX SWITCHES

Both of these switches are used to define the Unit Address for the equipment. They are only read at power-up.

Position `0' on the left hand switch will disable the RollCall™ function on the unit; all other positions on these switches may be used to set the Unit Address in Hex. (Left hand switch 1 to f, right hand switch 0 to f)

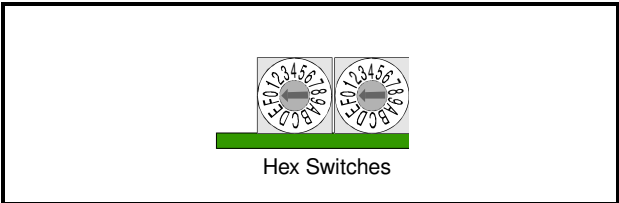
If an address is already in use the RollCall™ receive and transmit LED's will flash alternately at a 1 second rate. The unit must then be powered-down, a unique address selected and the unit powered-up again.

Note that the Shoebox active front panel has a separate and different address to the Gateway.

The Gateway address can be set to zero, (which will disable RollCall function) and all features of the shoebox will still work *except* for the RS422 port.

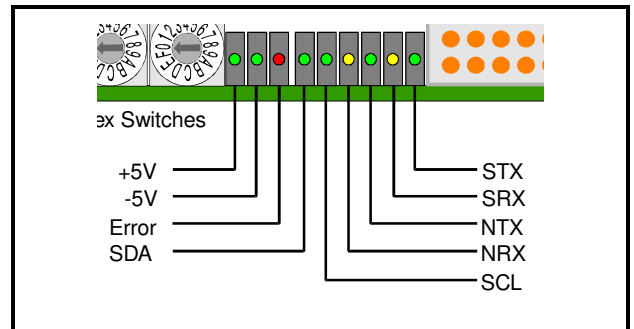
Therefore if the RS422 port of the shoebox is not needed, the second address may be saved by setting the gateway to zero. The front panel will still have an address if it needs to be used.

Note that in a RollCall™ segment, all units must have different unit addresses.
For more information see RollCall™ section.



LED INDICATORS

- +5V This green LED indicates that the +5V supply is present.
- 5V This green LED indicates that the -5V supply is present.
- Error This red LED indicates that the processor is running outside of its normal operational parameters.
Note that this LED will flash during startup.
- SDA This green LED will flash indicating I²C backplane data line activity.
- SCL This green LED will flash indicating I²C backplane clock activity.
- NRX This yellow LED will flash indicating data is being received via the RollNet connection.
- NTX This green LED will flash indicating data is being transmitted via the RollNet connection.
- SRX This yellow LED will flash indicating data is being received via the RS422 connection.
- STX This green LED will flash indicating data is being transmitted via the RS422 connection.



LED Status Information

LED	Continuously ON	OFF	Flashing
+5V	Normal +5V supply OK	+5 V Power Supply Failure	N/A
-5V	Normal -5V supply OK	-5 V Power Supply Failure	N/A
Error	Error - Gateway software not running	Normal – Software cleared during operation	Error - Software constantly rebooting (Watchdog)
SDA	Error - Backplane data line error	Normal - I ² C backplane data line idle	Normal – Indicates backplane data line activity
SCL	Error - Backplane clock line held Low	Normal - I ² C backplane clock line idle	Normal – Indicates backplane clock line activity.
NRX	N/A	Normal – data line idle	Normal – Indicates data is being received via the RollNet connection.
NTX	N/A	Normal – data line idle	Normal – Indicates data is being transmitted via the RollNet connection.
SRX	N/A	Normal – data line idle	Normal – Indicates data is being received via the RS422 connection.
STX	N/A	Normal – data line idle	Normal – Indicates data is being transmitted via the RS422 connection.

Control Panels

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

1. Locally, by use of an active front panel (the control panel) for the 1U system
2. Remotely, by use the same control panel as in (1) above, connected by a single cable assembly
3. Remotely, from any number of control panels (1U), connected via the RollCall communications network
4. Remotely, from any number of PC's connected via the RollCall communications network
5. Preset controls and switches are provided on the card edge of each module, accessible behind the drop-down front panel.

The RollCall Communications System and Computer Control System

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

The RollCall command protocol derives control panel operating software 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.

For modules with the RollCall option fitted all card edge control functions are available on the remote control panel or any other controlling device. For some module cards additional control functions and readouts will be available to the RollCall panel but will not be accessible via the card edge controls.

Note that for some modules if any of the preset switches mentioned above are set to the ON position, it will not be possible for the function to be disabled by the remote control mechanism. Under these circumstances a message will be displayed on the active remote control panel indicating that control is not available. To avoid this situation it is recommended that all card edge preset switches be set to the OFF position.

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 the non-volatile memory of the module's dedicated Control Processing Unit under the control of RollCall. 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 yet powerful remote control system. The units in the system are joined via a high-speed network and each box enclosure (including active front panels) is a node on the network. A single network can have a maximum of 240 nodes with any combination of control panels and modular rack boxes. With the 3U box holding up to 16 cards, the system can accommodate 3840 (240 x 16) cards. Each box is physically addressed via switches on the Remote Control Interface.

Network bridges can be used to connect any network to up to 15 others nested up to 4 levels. A single controller can access up to 54241 ($1 + 15 + 15^2 + 15^3 + 15^4$) networks containing up to a total of 208 million $(3840 \cdot 16) \times 54241$ IQ modules.

The RollCall network has three interface connections on each IQ enclosure:

1. 75 Ohm coaxial BNC for box-to-box connections running at 2.5 Mb/s.
2. RS485 9 way 'D' connector for internal bus connections such as to front panels running at 2.5 Mb/s.
3. 38.4 Kb/s asynchronous RS422 port for binary and ASCII terminal access for third party equipment.

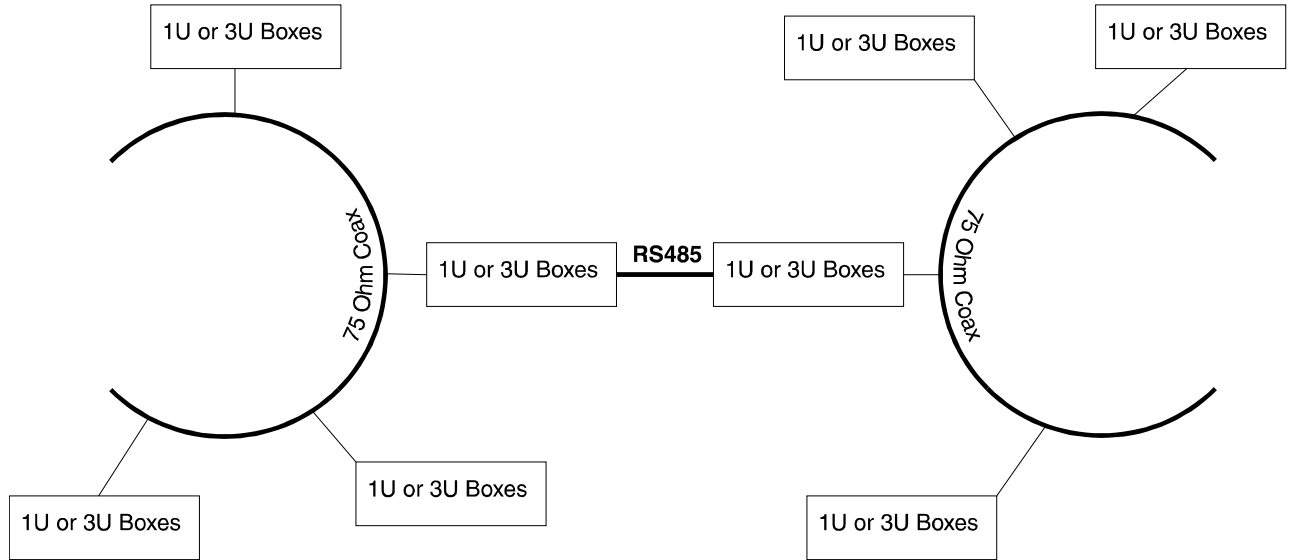
The RS422 and RS485 interfaces share the same D connector. Selection of the interface format is by a switch on the Remote Control Interface.

The primary connection interface will be the coaxial network. Each section can support up to 64 unit loads at lengths of up to 400 metres. The following is a table of unit loads for each type of equipment.

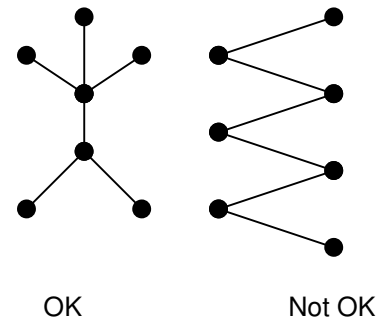
Equipment	Unit loads
1U ShoeBox + front panel	4
1U box (up to 6 single width modules)	4
3U box (up to 16 modules with removable Gateway card.)	2
Stand alone unit (Supervisor, MDD, Golden Gate)	2
PC Remote module	1

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.



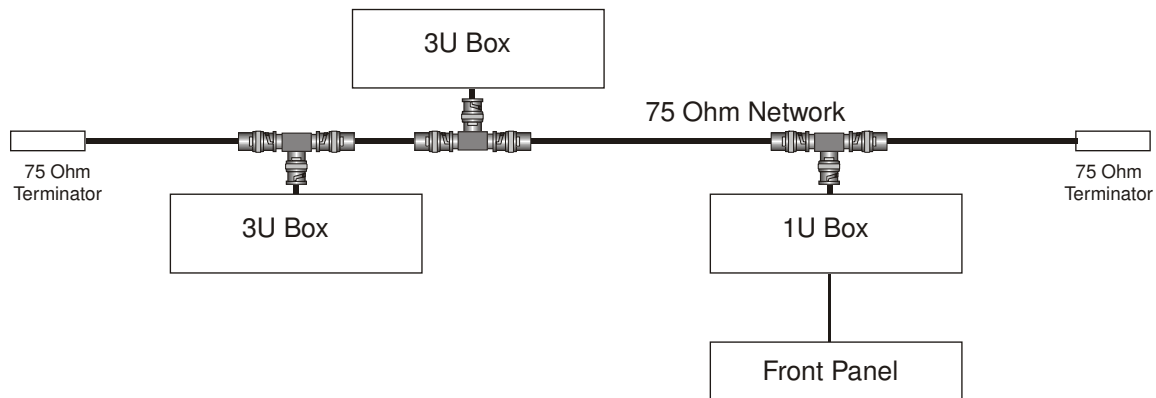
The maximum number of hub transitions between any number of nodes is 6.



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 400m.

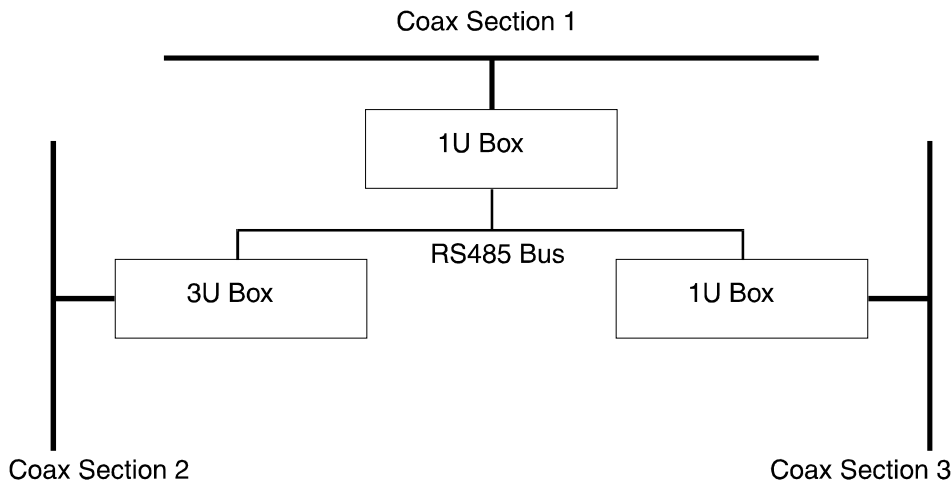
Example configuration:



RS485 Differential Interface

This interface allows bus connections to internal pieces of equipment such as front panels. It is a multi-drop differential bus with a data rate of 2.5 Mb/s. The data format used on this bus is identical to that used on the coaxial network, hence can provide a natural hub between coaxial sections.

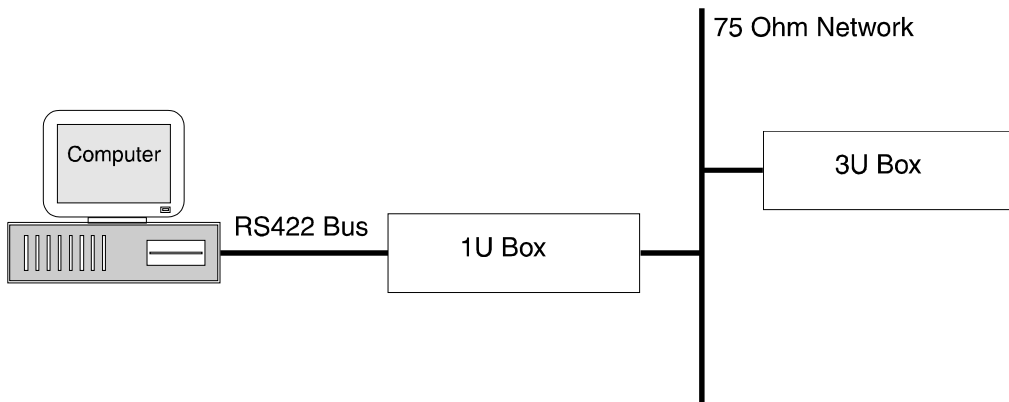
Example configuration:



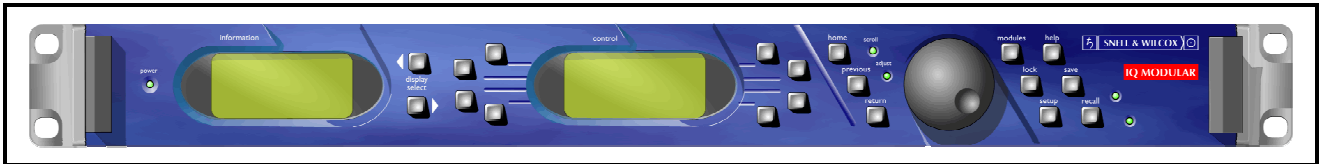
RS422 Asynchronous Interface

This interface is specifically designed for third party connections into the system and runs at 38.4 Kb/s. This allows PC's or any other serial device access to any of the units within the system. Every active 1U or 3U box has one of these ports. The port operates in binary mode: formatted packet data is sent to the port using STX and ETX characters.

Example configuration:



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



1U ACTIVE CONTROL PANEL

GENERAL INFORMATION

Modules may be controlled by means of a local, front control panel, by a similar panel at a remote location or a computer interface. Communication is via a wired network system called RollCall™ and many units may be controlled.

THE CONTROL PANEL

All operational parameters and selections are made using a system of menus displayed in two LCD windows.

Menus are selected by push buttons and further menu selections made by rotating a spinwheel and pressing a push button.

The spinwheel also allows continuously variable parameters, (where applicable) to be adjusted and the settings seen in the LCD window.

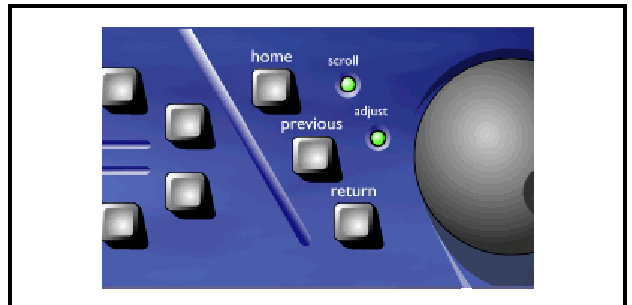
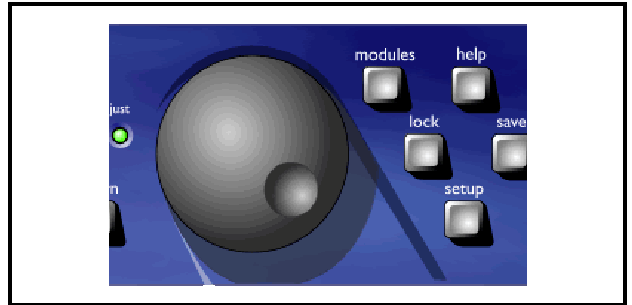
Various specific operations may be achieved by operating dedicated push buttons.

The Menu System

The system may be considered structured as a set of menus and sub-menus that are displayed in the Control window. The **Information** window will display the current status of the controlled module and other information messages. (e.g. error comments, warnings etc.)

The **Control** display contains the names of the lower-level menus that may be scrolled through using the spinwheel.

The sub-menu may be then be selected by pressing the push button adjacent to the arrowhead in the text line of the menu name.



This sub-menu will then be displayed in the window and will have the option of selecting another sub-menu in the same manner, or allow the adjustment of a particular parameter.

Pressing the **Home** button will display the **Select Menu** in the control window from any position in the menu hierarchy.

The **Previous** button allows a return to the last menu that was changed. Up to 20 changed menus may be retraced using this function.

The **Return** button will allow access to the previously selected upper-level menu.

Note that the spinwheel will only be operative when the **Scroll** green LED is illuminated, indicating that a menu with more than four text lines is being displayed. Operating the spinwheel then allows the other text lines to be displayed.

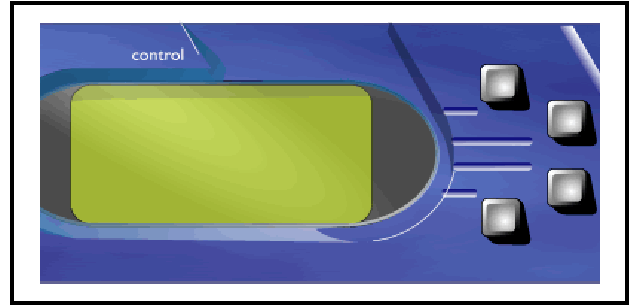
When illuminated the **Adjust** LED indicates that parameters of the selected module may be adjusted.

THE LCD DISPLAY WINDOWS

Control Window

The **Control** window displays all Selection Menus and sub-menus.

The selection is made by pressing the button adjacent to the required item.



SYMBOLS

Symbols used in this window have the following meanings:



These symbols, to the right or left of text indicate that the item may be selected. Pressing the button adjacent to this symbol selects the menu item.

...

When three dots (periods) follow an item it indicates that more sub-menus are available under this item.

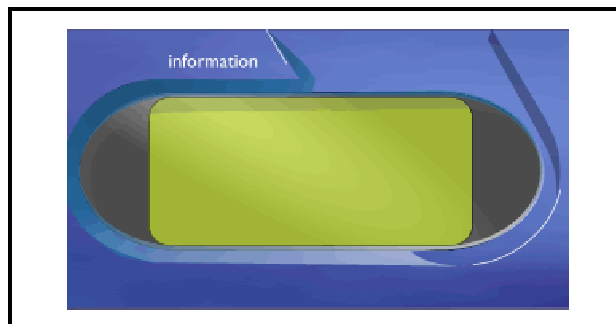
Information Window

The Information window has four lines of text indicating current selections and various information messages.

Note that some units will overwrite the information window indication with their own messages. Under these conditions the control panel will only be able to write to the information window when the unit has been disconnected.

The first line will contain the name of the unit which is currently being controlled.

The second, third and fourth lines provide information

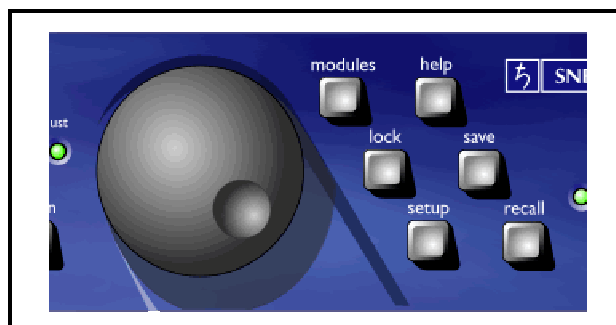


OVERVIEW

The control panel allows access to modules in the following sequence:

Access to unit, and then access to the gateway module of a unit, which in turn allows access to a particular module that then allows module functions to be controlled.

Alternatively the control panel allows direct access to stand-alone units.



Operation from Power-Up

On power-up the control window will display:

No Active Module

Modules: X=Number of modules visible to the system

Note that if this the first time the Shoebox has been connected to the system it is possible (but unlikely) that other units on the network will have used the same hex address for the Gateway and/or the front panel. If this occurs a warning will be given and the offending address should be changed. The Gateway address can be changed using the hex switches (see section 3 page 3) and the front panel address via the Setup menu.

The MODULES button should then be pressed and will become illuminated. A list of locations and their status (see SYMBOLS) will then be displayed in a list.

Pressing the button adjacent to the gateway symbol (or stand-alone unit) reveals the list of locations followed by a list of modules at that location.

To connect the desired module press the button next to the right hand arrowhead. The main menu **for that** module will then be displayed in the CONTROL window and the module will be connected to the control panel.

The INFORMATION window will now display the name of the module and the status/settings of that module.

For details of the module sub-menus available, reference should be made to the operator's manual for that particular module.

To disconnect the module press the MODULES button again and the CONTROL display will show the module name followed by a illuminated lamp symbol (this indicates that the module is connected)

Selecting this symbol will disconnect the module and when the MODULES button is pressed again the display will show the module name and the right hand arrowhead without an intervening symbol indicating that the module is disconnected.

LED Indicators

The green LED indicator on the front panel marked POWER will be illuminated when the unit is powered-up.

The LED marked ACTIVE will be illuminated when the front panel is connected to and communicating with a unit.

The LED marked ERROR will flash to indicate that errors have occurred.

Note that if an attempt is made to access data that does not exist, this will be recognised as an ERROR.

If the HELP button indicator is also flashing pressing this button will display a list of the errors in the control window.

Pressing the button adjacent to the error message will clear the error message if the error no longer exists.

Note that the ERROR LED will also continue to flash steadily until all the error messages have been cleared.

The ERROR LED will also flash momentarily during a RollNet reconnect. If this LED lights up continuously, or flashes intermittently, the network is unstable. This would indicate broken cabling, missing termination etc.

Dedicated Push Buttons

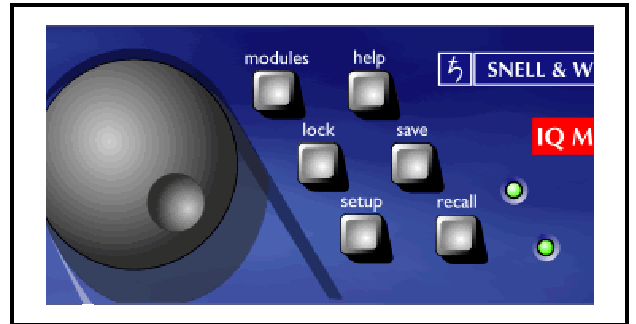
Various specific operations may be carried out by using these push buttons.

When pressed the button LED will become illuminated, indicating that the function is active. Pressing the button again deactivates the function and the button LED will turn off.

MODULES

When pressed and becomes illuminated, this button displays in the CONTROL window a list of the modules that are available to be connected to the control panel.

The list shows the name of the module and the connection condition (connected or not connected) by means of symbols.



The symbols used are shown below:



This symbol represents a gateway.



This indicates that the unit is currently connected to this control panel. Pressing the adjacent button will disconnect the unit from the control panel.



This indicates that this unit is currently connected to and locked by another control panel.



This shows that the unit is in the standby mode. (i.e. currently not active but locked by this control panel)



This represents a bridge connection

SAVE

This button reveals a list of 8 memory locations and allows the address of the currently active module to be saved to one of these memory locations by pressing the button adjacent to the desired memory location number.

RECALL

This button reveals a list of 8 memory locations and allows the saved information to be recalled from one of the memory locations by pressing the button adjacent to the desired memory location number.

When selected the module will be reconnected without the need to select and connect via the modules list.

HELP

Pressing this button will display warnings in the windows when applicable.

If an error has occurred (ERROR indicator illuminated) a message will be displayed in the control window. Pushing the button adjacent to the error message will clear it from the list.

If there are no errors the window will display:

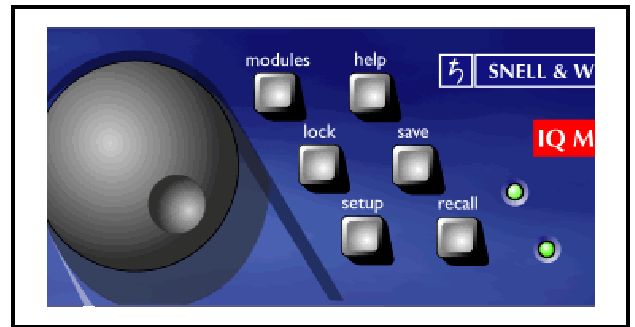
No Warnings

LOCK

Pressing this button enables a selected module to be locked or unlocked to the control panel. This function will only be available for a unit that is already connected to the front panel. Other modules may be still be connected to, and controlled by the control panel but when the system is powered-up the control panel will only lock to the designated default unit allocated in the Set-Up mode.

The name of the currently selected unit and the 'lock' status. i.e. whether the unit is locked or unlocked to this control panel, will be shown in the Information window.

If a unit is locked/unlocked to this control panel 'Lock/unlock' will appear after the units name in the information window. To change the lock press the Lock button; this will toggle the text from 'lock' to 'unlock' The connection may then be saved to a memory location by pressing the SAVE button function.



The **Display Select** buttons allow the Information Window to display two different sets of information:

1 Identity Codes

The **first line** will show the unit name

The **second line** will show the unit address code and the RV (RollCall Version)

The **third line** will show the unit identity (RollCall) for that unit as three sets of digits separated by a dot.

1st set = The version of the control unit
2nd set = Variant of software version
3rd set = Control compatibility version
 number

The **fourth line** will display system save codes

2 Current selections and conditions

First Line: ***(Unit Name)***

This line shows the name of the unit.. If the name has been changed in the Unit Name Menu the new name will appear here.

Second line: **Signal(s) input status**

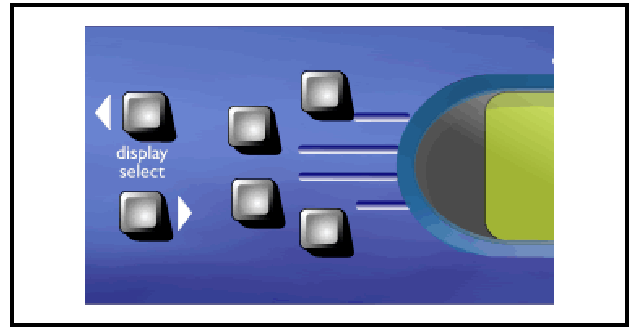
Third Line: **Status of other signal**

Fourth Line:

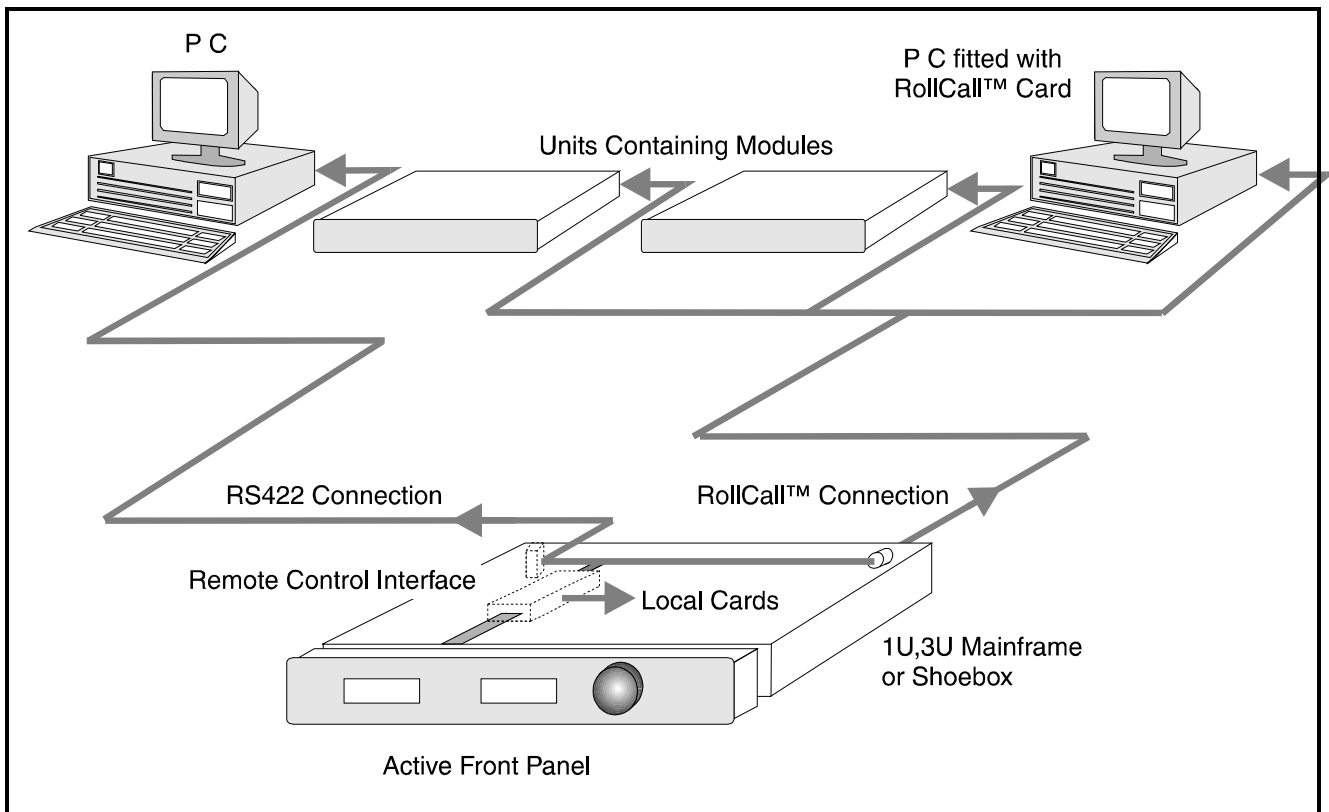
This line may be blank or show one of the following:

Presetting

Presetting indicates that the unit has been asked to return all settings to their default values and the unit is performing this operation.



CONTROL SYSTEM OVERVIEW



The RollCall™ control system allows RollCall™ compatible modular cards fitted into 1U or 3U main frames and dedicated units, to be controlled by means of an active front panel (local or remote), a PC. (fitted with a RollCall™ card) via the RollCall™ (a single coaxial cable) network or by a P.C. via an RS422 connection.

A **Remote Control Inter-Face (RCIF)** is used between the active front panel and the communication connectors and is housed in the mainframe.

The active front panel may communicate to either of the following:

- Modular cards contained within the local mainframe
- The RollCall™ network (via BNC Connector)
- PC via 9-pin D connector for RS422 or RollCall™ 485

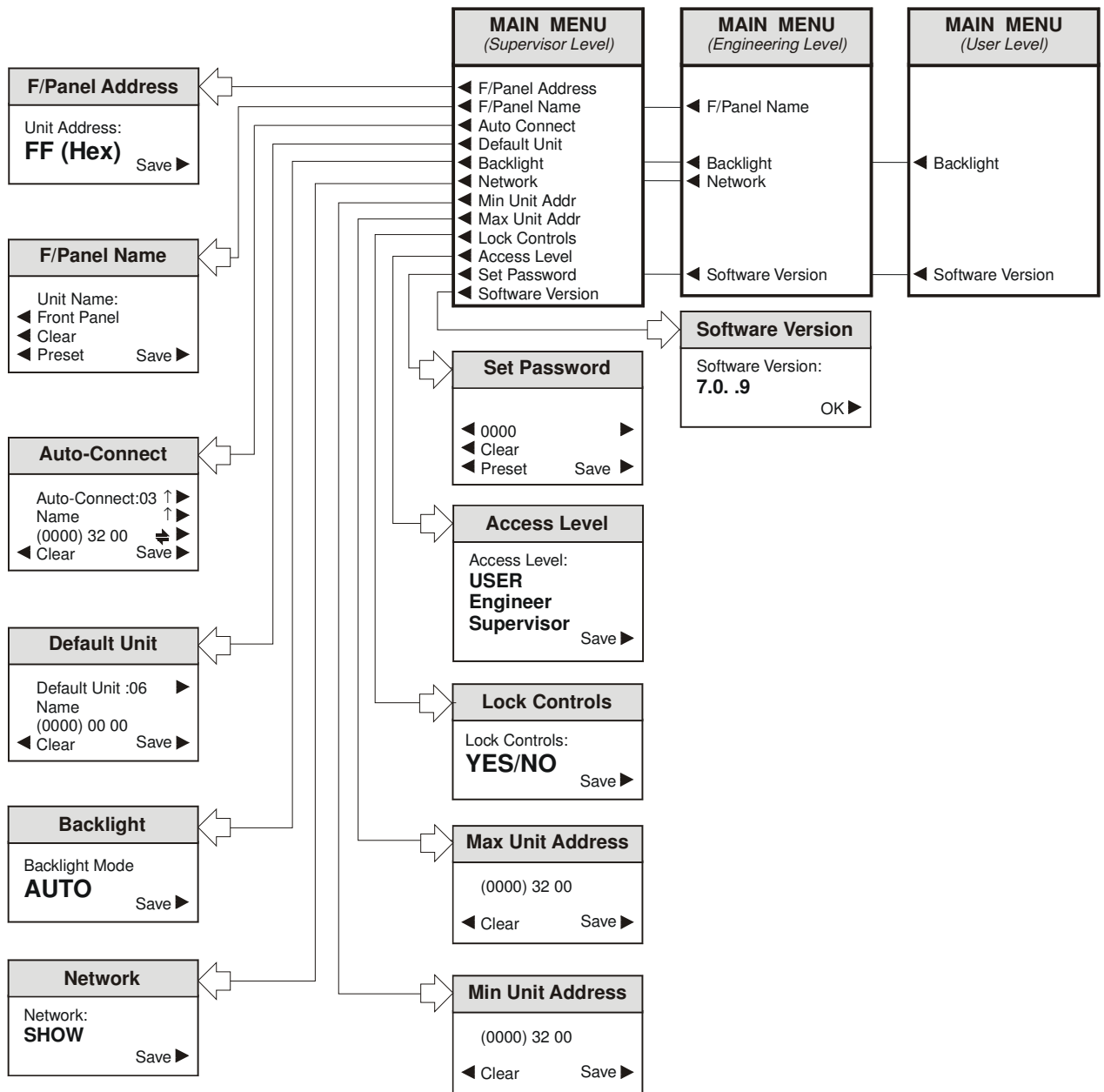
Operation uses a system of menus displayed in two LCD windows on the active front panel.

Menu items are selected by push buttons and further menu selections made by rotating a spinwheel and pressing a push button.

The spinwheel also allows continuously variable parameters, (where applicable) to be adjusted and the settings seen in the LCD window.

Modules may be accessed and controlled by activating the RCIF system, stepping into a list of modules and connecting to a particular module. The active control device may then control the module.

Front Panel Setup via the Front Panel Menu System



Setup Menu System

SETUP MENU SYSTEM

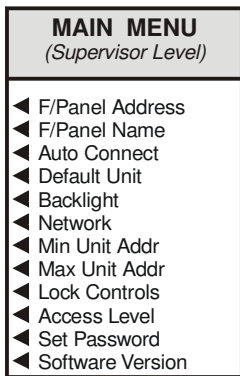


SETUP

Pressing this button displays a list of front panel options in the CONTROL window. Examples of these are shown in the 'Setup Menu System' drawing on the previous page.

SETUP Sub-Menus

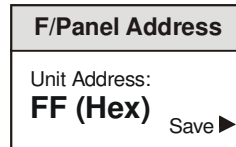
These are selected by pressing the button adjacent to the desired function.



Note that all these sub-menus include a SAVE function that is used to save particular settings. If the changed settings do not need to be saved use the RETURN function to return to the previous menu; this action will abandon any changes and revert to the previously saved settings.

F/Panel Address

The address of this control panel will be displayed as a 2-digit hexadecimal code.

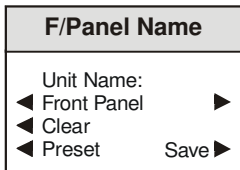


Note that the code 0,0 effectively switches the unit off from the network. The codes 0,1 to 0,F inclusive are reserved for bridge addresses. Codes 1,0 to F,F inclusive are available to the user.

The address code is user defined in the range 1,0 to F,F and is set by rotating the spinwheel to the desired code and selecting the SAVE function.

F/Panel Name

The control panel may be given a name using this function (e.g. Edit Suite, Studio 2 etc.)



The maximum number of characters, including spaces, is 19 and may consist of letters and numbers (ASCII Characters)

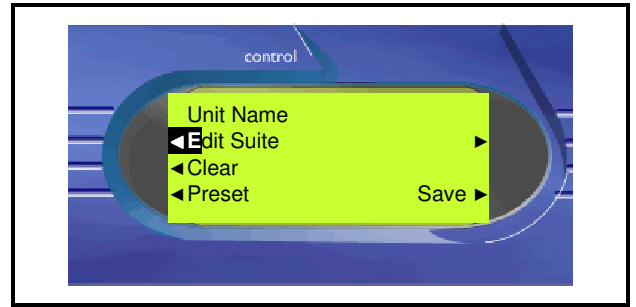
To edit the name press either the left or right hand button adjacent to the arrows for the centre text line until the character to be changed is flashing. (In the picture opposite this is the letter E) Using the spinwheel, scroll through to the character required and then, using the left and right hand buttons, select the next character; the other characters may be changed in the same way.

When the name has been set to that required press the SAVE function to save the name. Note that to remove a character and leave a clear space in the text line the **Clear** function (above Preset) should be used. The **Preset** function returns the text to the original data.

The code may then be changed using the spinwheel.

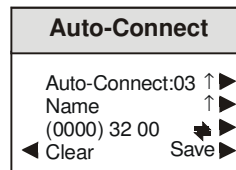
The code may be reset to 0000 00 00 by pressing the clear button. This action also removes the unit name from the display and inserts a ? symbol indicating that no unit will be connected to this session.

The Auto Connect set-up may be saved by pressing either the dedicated front panel Save button or by pressing the button adjacent to the Save display text.



Auto Connect

The Auto Connect menu allows a number of units to be automatically connected to the control panel at power-up.



Up to 16 units may be designated in this way by assigning a number to them. (00 to 15)

Note that these numbers are also used to assign the default unit .

The units in this list are (on power-up) in the standby mode and although not currently active are locked to this control panel and may not be controlled by any other panel.

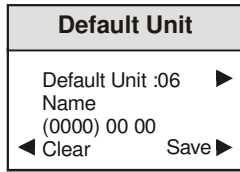
The unit name (second text line of the control window display) may be displayed by scrolling through the list using the button adjacent to the ì arrow.

The network address of the unit is shown in the third text line as three sets of hexadecimal codes.

The first set is the network address, the second set is the physical unit address and the third set is the port address. Each set of these codes may be selected (the set will be shown enclosed in brackets) by pressing the button adjacent to this line.

Default Unit

On power-up the default unit will be automatically connected, its menus retrieved and will be ready for active control.



To define the default unit select Default Unit. Press the button adjacent to the default text arrowhead until the desired number is reached. (This number is the number assigned to a particular unit in the Auto Connect set-up) The name of this unit will appear in the second line of text.

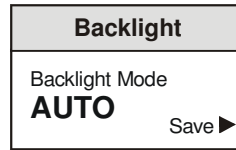
Select Save to save this setting.

The Clear selection sets the default unit to `None'

Note that if no units have been assigned numbers in the Auto Connect set-up a ? will appear in the second line of text. Also when the numbers are selected (in rotation) the word `None' will appear after Default Unit when the number 15 is exceeded. This confirms that no units have been assigned a number.

Note that only one unit may be designated as the default unit.

BackLight



Selecting this function allows the backlighting of the display windows to set, by rotating the spinwheel, to the following modes:

OFF

Backlight always Off. Use this mode where ambient light level is high.

ON

Backlight always On. Use this mode where ambient light level is low to improve text visibility.

AUTO

Backlight will normally be On but will default to Off after 2 minutes. The backlight will return to Auto On whenever any front panel control is operated.

Press the button adjacent to the Save text to save the backlight mode.

Network

This function allows the front panel to be `hidden' from the network system. In the Hide mode this front panel will not appear in the Module List displayed on other control panels in the system.

Network	
Network: SHOW	Save ►

SHOW

This front panel will appear in the Module List of other control panels.

HIDE

This front panel will not appear in the Module List of other control panels.

Min/Max Unit Addr

The front panel can only hold a maximum of 200 addresses. The Min and Max Unit Addr (Address) function allows a range of addresses to be configured for partial use of the network.

Min Unit Address	
(0000) 32 00	
◀ Clear	Save ►

The **Min Unit Addr** selection sets the minimum address.

Max Unit Address	
(0000) 32 00	
◀ Clear	Save ►

The **Max Unit Addr** selection sets the maximum address.

The overall range of addresses is from 1 to 255.

Lock Controls

To set this function enter at Supervisor level, select the **Lock Controls** item to reveal the dialogue box.

Lock Controls	
Lock Controls: YES/NO	►

Select either YES or NO and save.

The function is now set.

Note that if this function is set to

Lock Controls: YES

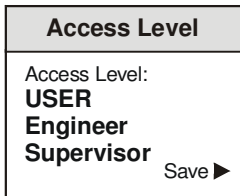
and the unit is powered-up, the message

Front Panel Locked by Supervisor!

will appear.

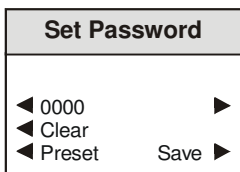
Access Level

The setup of the active front panel may be accessed at various levels. At the highest level (Supervisor) access is allowed to all functions. This level may only be accessed by entering a password. At lower levels (User and Engineer) access is only allowed to a limited number of functions.



As supplied the unit will be in a temporary Supervisor mode with no password protected access levels.

From the main menu select **Set Password**



To enter the Supervisor level and set up a password proceed as follows:

1. Power-down the unit
2. Hold down the **Modules** button and power-up the unit. Continue to hold down the button for a few seconds while powering-up.
3. From the main menu select **Access Level**
4. Using the spinwheel, select **Supervisor** and press **Save**
5. From the main menu select **Set Password**
6. The default password will be 0000 To change the password select the line for digits 1, 2, 3 and 4, and using the spinwheel to select the desired characters.
Note that only numbers in the rage of 1 to 8 may be used; 0 and 9 cannot be used.
 Press **Save**

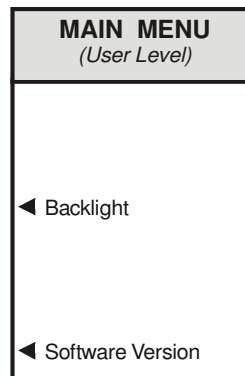
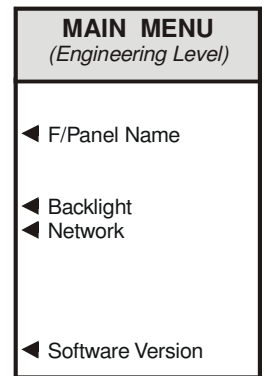
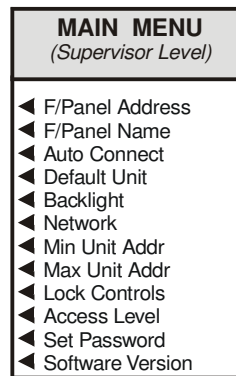
The password has now been set.

Selection levels are:

- USER** Provides access to basic user controls.
- ENGINEER** Provides access to more controls than at user level but less than at supervisor level.
- SUPERVISOR** Provides access to all available control functions.

To set up this function, rotate the spinwheel to the desired level and select Save.

Note that the number of control functions available at the various levels are set by the software/hardware of the module and are not user-adjustable.



Software Version



This shows the Software version number. Press OK to return to the previous menu.


Front Panel Setup via the RollCall Control Templates


Control

Name

The control panel may be given a name using this function (e.g. Edit Suite, Studio 2 etc.) The maximum number of characters, including spaces, is 19 and may consist of letters and numbers (ASCII Characters)

This function allows the name of the front panel as seen on the network, to be changed.

To change the name, type the new name in the text area and then select  (return); the new name will now be saved.

Selecting Preset  will return the text to the default name.

Address

The address of this control panel will be displayed as a 2-digit hexadecimal code.

Note that the code 0,0 effectively switches the unit off from the network. The codes 0,1 to 0,F inclusive are reserved for bridge addresses. Codes 1,0 to F, F inclusive are available to the user.

The address code is user defined in the range 1,0 to F,F. Use the scrollbar to select the desired code.

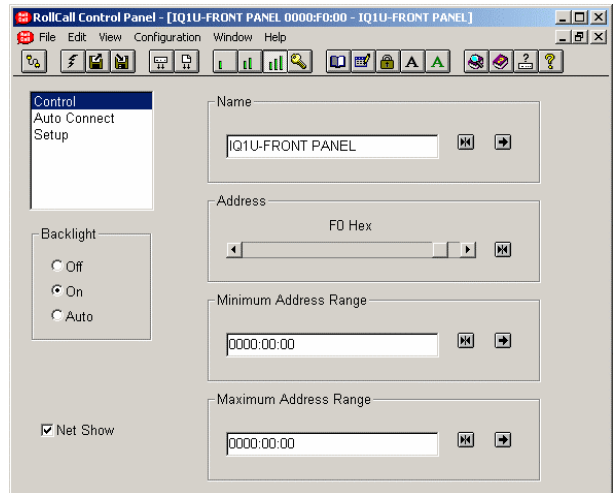
Minimum/Maximum Address Range

The front panel can only hold a maximum of 200 addresses. The Min and Max Unit Addr (Address) function allows a range of addresses to be configured for partial use of the network.

The Minimum Address Range selection sets the minimum address.

The Maximum Address Range selection sets the maximum address.

The overall range of addresses is from 1 to 255.



Backlight

This function allows the backlighting of the display windows to set to the following modes:

Off

Backlight always Off. Use this mode where ambient light level is high.

On

Backlight always On. Use this mode where ambient light level is low to improve text visibility.

Auto

Backlight will normally be On but will default to Off after 2 minutes. The backlight will return to Auto On whenever any front panel control is operated.

Net Show

This function allows the front panel to be "hidden" from the network system.

When unchecked this front panel will not appear in the Module List displayed on other control panels in the system.

Auto Connect

This function allows a number of units to be automatically connected to the control panel at power-up.

Up to 16 units may be designated in this way by assigning a number to them. (00 to 15)

Note that these numbers are also used to assign the default unit.

The units in this list are (on power-up) in the standby mode and although not currently active are locked to this control panel and may not be controlled by any other panel.

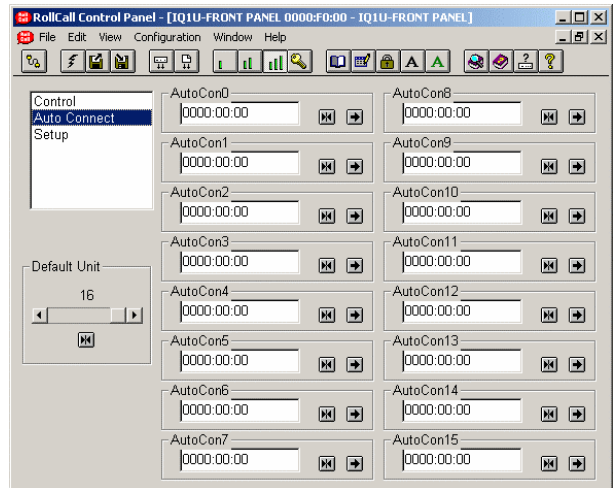
The network address of the unit is shown in the text line as three sets of hexadecimal codes.

The first set is the network address, the second set is the physical unit address and the third set is the port address.

The code may be changed by typing in the new code.

The code may be reset to 0000 00 00 by pressing the **P** button. This action also removes the unit name from the display and inserts a ? symbol indicating that no unit will be connected to this session.

The Auto Connect set-up may be saved by pressing **→** (return).



Default Unit

On power-up the default unit will be automatically connected, its menus retrieved and will be ready for active control.

To define the default unit use the scrollbar until the desired number is reached. (This number is the number assigned to a particular unit in the Auto Connect set-up)

The **P** selection sets the default unit to 'None'

Note that only one unit may be designated as the default unit.

Setup


User Levels


The setup of the active front panel may be accessed at various levels. At the highest level (Supervisor) access is allowed to all functions. This level may only be accessed by entering a password. At lower levels (User and Engineer) access is only allowed to a limited number of functions. As supplied the unit will be in a temporary Supervisor mode with no password protected access levels.

Connect to Now

This function allows an immediate connection to be made to a unit.

RollCall unit address


The RollCall unit address should be typed in and selecting  (return) will make a connection to that unit.


Selecting  (return) will return the RollCall unit address to 0000:00:00.

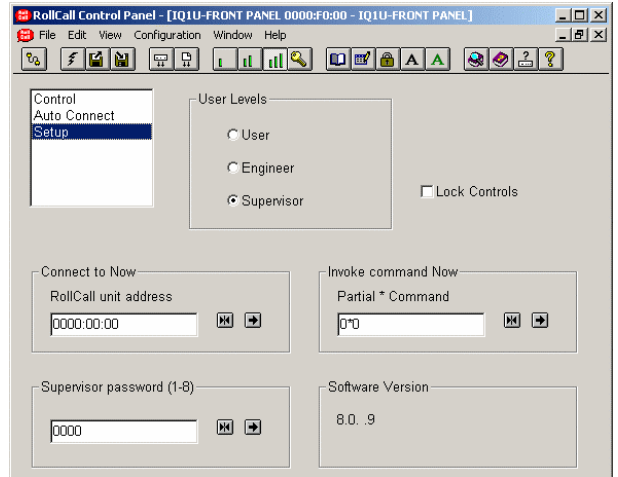
Supervisor Password (1-8)

The 4-digit supervisor password may entered here.

Note that only numbers in the range of 1 to 8 may be used; 0 and 9 cannot be used.

Selecting  (return) will save the new password.

The  preset selection sets the password to 0000.



Lock Controls

When enabled the front panel controls will be locked.

Note that if this function is enabled and the unit is powered-up, the message


Front Panel Locked by Supervisor!


will appear.

Invoke command Now

This function allows an immediate command to be sent to a unit.

Partial*Command

The Partial*Command should be typed in and selecting  (return) will send the command to that unit.

Selecting  (return) will return the Partial*Command to 0*0.

Software Version

This will show the software version followed by the serial number.

RollCall Control Templates for the IQHS1U Enclosure RCIF

Control

This function displays information about the controllers for each slot.

Any of the 6 slots may be interrogated and the following information displayed.

Packet Count

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

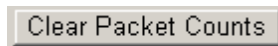
If the **Update Packet Stats** item is checked the number of control packets from the currently selected connected controller and from all connected controllers is shown to the right of the controller address. The number of blind control packets is shown to the right of the blind controller address.

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 (-).

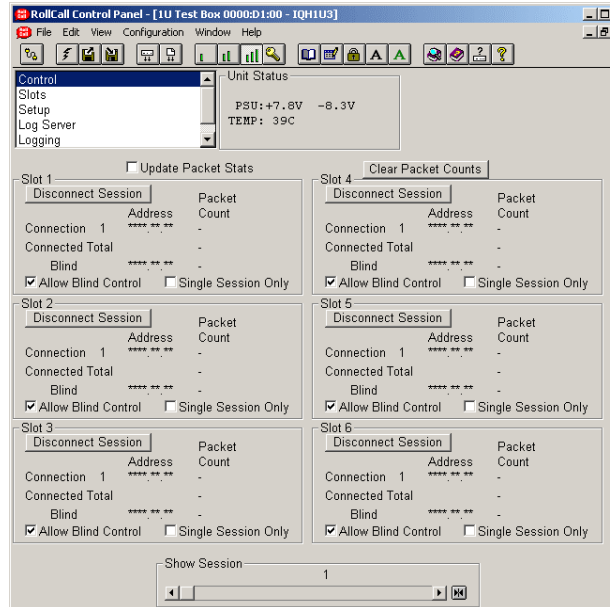
*Note that the packets are still counted while **Update Packet Stats** is disabled. When enabled the Gateway will display current totals; **they will not restart from zero.***



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

Show Session

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



Note that for this and other screens the following applies to the scroll bars:

The and symbols at the ends of the scroll bar allow the value to be adjusted in discrete steps.

The numerical value will be shown next to the scroll bars and selecting Preset will return the setting to the calibrated value for that item.

For text boxes the following applies:

To change the text, type the new text in the text area (the return symbol changes to red) and then select (return) to save the new text. The symbol will then become black again.

Selecting Preset will return the text to the default text.

Control (Continued)

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.

Disconnect Session

This will disconnect the currently displayed connected controller.

Connection

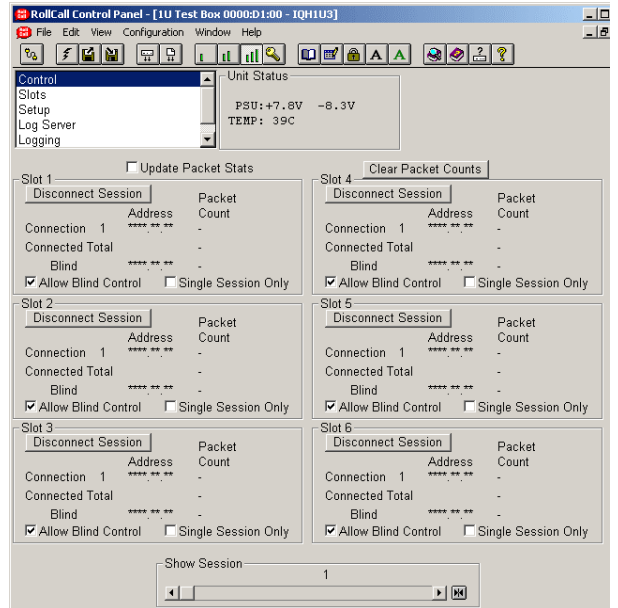
This displays the address of the connected controllers. The Show Session control can be used to scroll through the connected controllers.

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

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.



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.

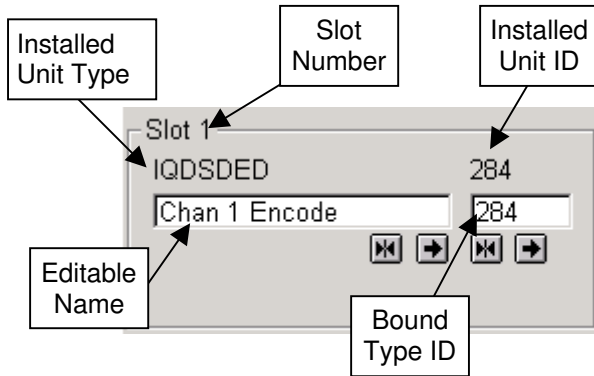
Single Session Only

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

Slots

This function allows each slot to be named and interrogated.

Overview



Installed Unit Name

This shows what is fitted in the slot.


Installed Unit ID


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

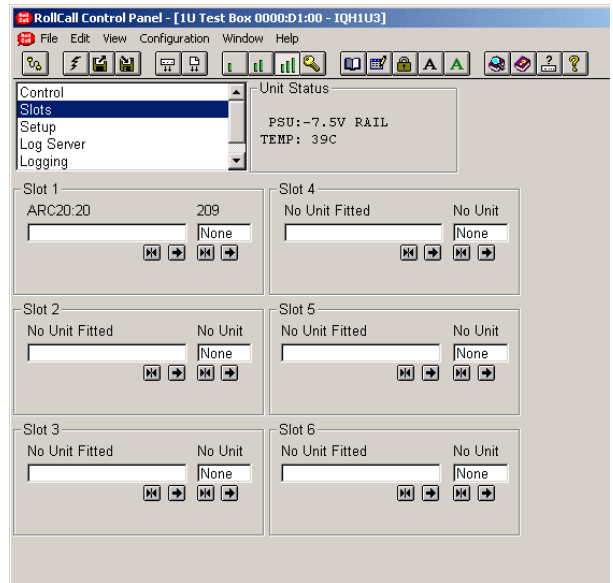
Editable Name

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, as defined by matching Installed Unit ID and Bound Type ID. 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. Although the values in this edit box remains the same. When this entry is edited, the current Installed Unit ID gets copied to the Bound Type ID.

This function also has the advantage that names and types may be setup before delivery.

The  symbol represents the Preset function and will return the name to the installed name and the ID to the installed ID.

Selecting the  symbol will save the new name and ID.



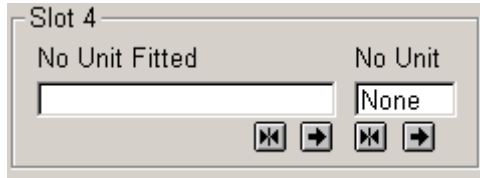
Bound Type ID

The Bound Type function allows the slot to be associated with a particular type of module (e.g. an 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. Edit the Bound Type ID after editing the Editable Name.

Intentionally Empty Slot

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



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

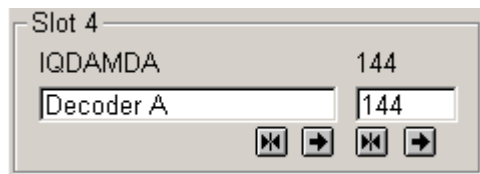
In the absence of other modules the Gateway does not log Module Status for this slot position.

Module Absent – Unit Bound

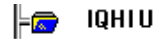
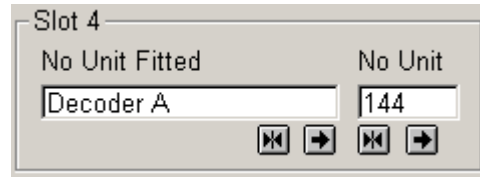
If the slot should have a particular module fitted (as set by the Bound Unit function) but if it is absent the Installed Unit Name widow will show **No Unit Fitted** and the Installed Unit ID window will show **No Unit**.

Correct Module Fitted

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



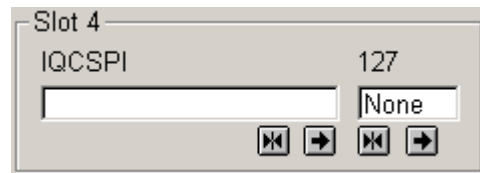
In the absence of other modules the Gateway will log Module Status as OK, and show Module Status = OK on the Logging Page. The gateway also logs MSG=UNIT PRESENT for the slot position.



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

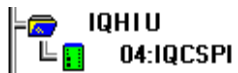
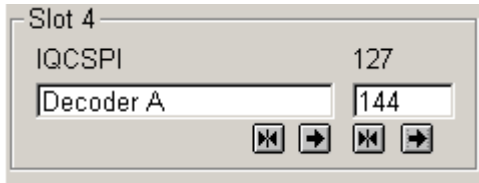
Module Fitted – No Bound Unit

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.

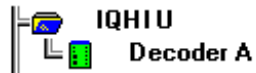


Incorrect Module Fitted

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.

**Correct Module Fitted**

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



Setup

This function allows various system functions to be set up.

This function allows various system functions to be setup.

Unit Name

This allows the unit to be given a meaningful name.

Serial Number

This shows the serial number of the unit.

Hardware Version

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

Software version

This shows the software version installed.

Build Number

This shows the software build number of the unit.

Loader Version

This shows the version of the gateway software loader. [The loader operates at start up only, validating all gateway files before the main application runs]

Menu Caches (Module)

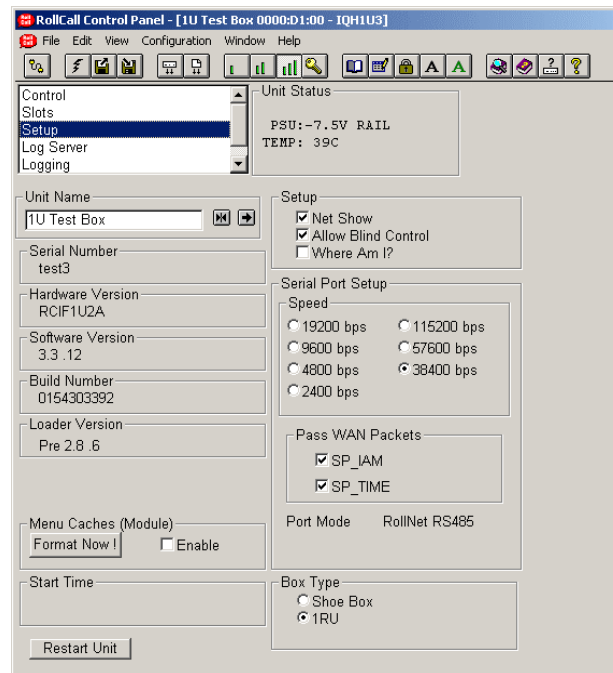
The Gateway caches module menu sets locally to improve menu upload speeds. In rare circumstances this may cause problems. If problems with module menu uploads are encountered the menu caches can be cleared or caching disabled.

Format Now!

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

Enable

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



Start Time

This shows the date and time that the unit was last restarted. If the gateway has never received a TimeStamp since restart, this field is left blank. *Note that this always shows GMT (Greenwich Mean Time).*



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

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.

Allow Blind Control

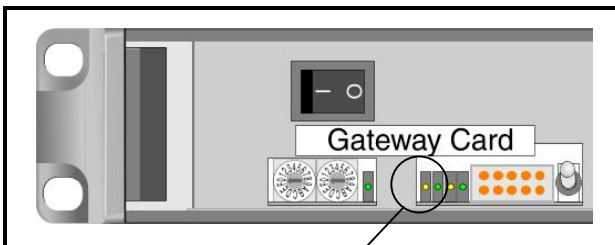
If the Gateway will be controlled by Blind Control then Allow Blind Control must be enabled.

If Blind Control is not used then Allow Blind Control may be disabled, giving protection against incorrectly set-up RollTrack sources. Note, if upgrading the gateway software, you must enable Blind Control.

Box Type

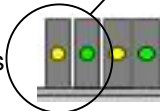
This item allows the 1U enclosure to be configured as a ShoeBox or a 3U Box.

Note that when the ShoeBox and 3U selections are made the templates will be different and some items will only be usable if the 1U enclosure is controlling the selected box type.



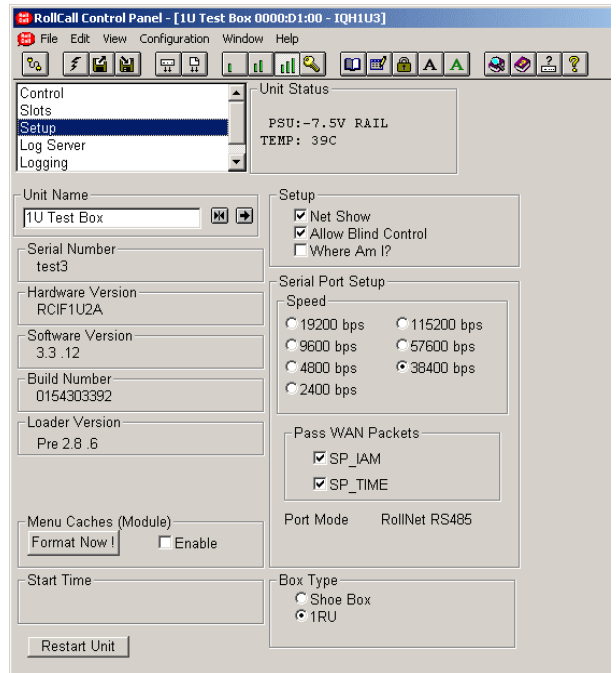
Where Am I?

TX and RX LED's



This allows the 1U enclosure to be physically located in a large system.

When this function is selected the TX and RX LED's on the gateway card will flash.



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.

Setup (cont)**Pass WAN Packets****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.

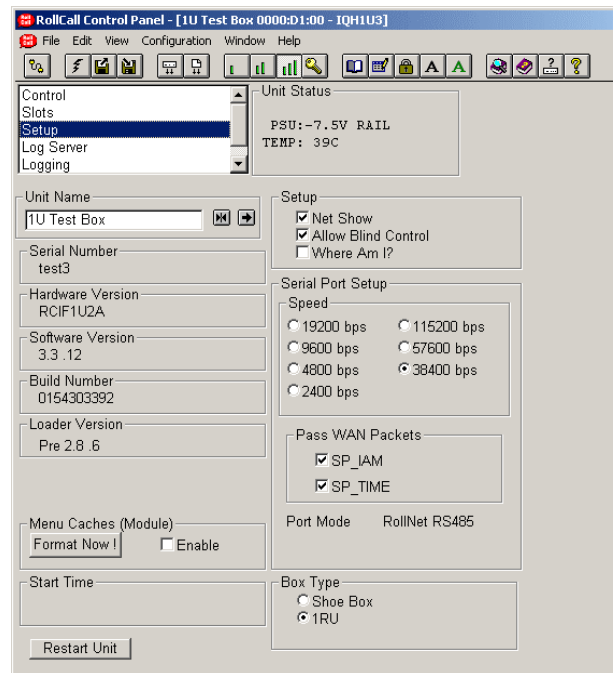
SP_TIME

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).

Port Mode

This item shows the current operating mode of the serial port (RS422, RS232 or RS485).





Log Server

This 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.

The  symbol represents the Preset function and will return the name to LogServer.

Selecting the  symbol will save the new name.

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

Logging Disabled

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

Named LogServer

If this item is checked Logging information will only be sent to the server named in the name window.
Note: matching of the name is case sensitive.

Any LogServer

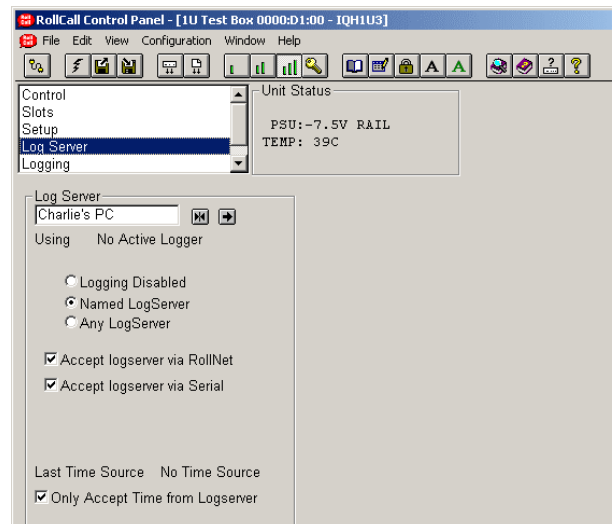
If this item is checked Logging information will be sent to any Logger on the system.
It is suggested that if there is only one server on the system, this option should be chosen

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"

Accept Logserver via RollNet

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



Accept LogServer via Serial

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

Last Time Source

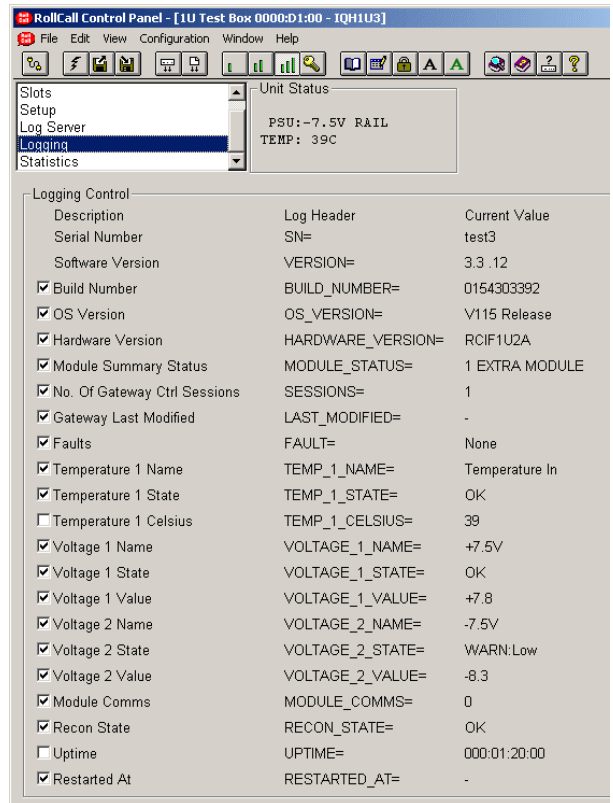
This shows the address from which the last time packet was received. This can be useful in configuring complex networks.

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.

Logging

This menu determines the information made available for logging.



Logging Fields			
Field Name	Field Name Description	Valid Field Values	Usage Description
SN	Serial Number	Serial Number	Format is standard S&W serial number consisting of character 'S' followed by eight digits, e.g. "S12345678"
VERSION	Hardware Version	Version Number	Format: "<PCB name>/<mod strike>", e.g. "RCIF3U2Y/2"
BUILD_NUMBER	Build Number	Text	For K_OS-based units, this is typically a ten-digit string, e.g. "0123456789". Future units may use a different format.
OS_VERSION	OS Version	OS Name & Version	Format: "<OS String> <Version String>", e.g. "KOS V115"
HARDWARE_VERSION	Hardware Version	Version Number	Format: "<PCB name>/<mod strike>", eg "RCIF3U2Y/2"
MODULE_STATUS=		OK 1 EXTRA MODULE n EXTRA MODULES 1 MODULE MISSING n MODULES MISSING 1 WRONG TYPE n WRONG TYPES	where 2 <= n <= 6 Status of module type/per slot configuration matching or Modules mismatched / missing
SESSIONS	Control Sessions	Number	0...n – No. of connected CONTROL sessions
LAST_MODIFIED	Last Modified	UTC Timestamp	The time a control was last modified on a unit. Format: as per ISO 8601 for Co-ordinated Universal Time (UTC), ie YYYY-MM-DDTHH:MM:SSZ, where the trailing 'Z' indicates UTC rather than local time.
FAULT	Internal fault status of unit	NONE FAIL: <fault description>	This field is used to report internal hardware or software faults detected by a unit (as distinct from external error conditions, e.g. loss of input).
RECON_STATE=		OK Warn Fail	0 RollNet reconnections in last 10 seconds 1 Rollnet reconnection in last 10 seconds >1 RollNet reconnection in last 10 seconds
UPTIME	Uptime in seconds	Number DDD:HH:MM:SS	Uptime in specified format updated every minute, NOTE: field value is zero buffered 001:08:10:00 (is 1 day, 8 hours, 10 minutes, 0 seconds)
RESTARTED_AT	Last Restarted (UTC)	UTC Timestamp	UTC Time of last reboot, formatted as per ISO8601 as above.
TEMP_1_NAME	Name of temp sensor	TEXT	Function name such as Temperature In, Temperature Out Internal Temperature, PSU Temperature, etc. These are set by the product and are not user settable.
TEMP_1_STATE	Temperature status	WARN: Low WARN: High OK FAIL : Low FAIL: High WARN: Disabled	Temp below normal operating range, but not critical Temp above normal operating range, but not critical Temp is within operating range Temp below normal operating range, Critical Temp below normal operating range, Critical Temperature detection has been manually disabled Each product must specify its own operating ranges and safety thresholds, however suggestion is that WARN thresholds exist 5 degrees C away from defined product FAIL thresholds. e.g. : Product Specification is 0-40 Degrees C, so WARN will be <= 5 and >=35.

Field Name	Field Name Description	Valid Field Values	Usage Description
TEMP_1_CELSIUS	Temperature in °C	Number	Temperature in Celsius Temperature will be blank if the temperature sensor is not enabled.
MODULE_COMMS	State of module comms bus	Number of bus errors per 20 seconds	Running average of bus errors, 0 would indicate good comms. For IQ Modules, this bus is I2c.
VOLTAGE_1_NAME VOLTAGE_2_NAME	Voltage rail name	Text	For IQ these are +7.5V & -7.5V rails.
VOLTAGE_1_STATE VOLTAGE_2_STATE	Is the voltage rail within spec?	OK FAIL: High FAIL: Low	Voltage rail is within spec Absolute value of voltage rail is above normal operating threshold Absolute value of voltage rail is below normal operating threshold <ul style="list-style-type: none"> This definition means that if the -7V rail is at -9V, it would be shown as FAIL:High Definition of out of spec is on a per product basis. The user manual for the product must reflect the out of spec ranges.
VOLTAGE_1_VALUE VOLTAGE_2_VALUE	The value of the voltage rail	Text	+nn.nnV -nn.nnV

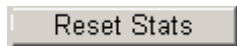
Statistics

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

In the event of a problem these error messages may be quoted to assist debugging.

Enable Net Stats

This item must be checked to enable the errors to be updated.



Selecting this function will reset all statistics to zero.

Recons

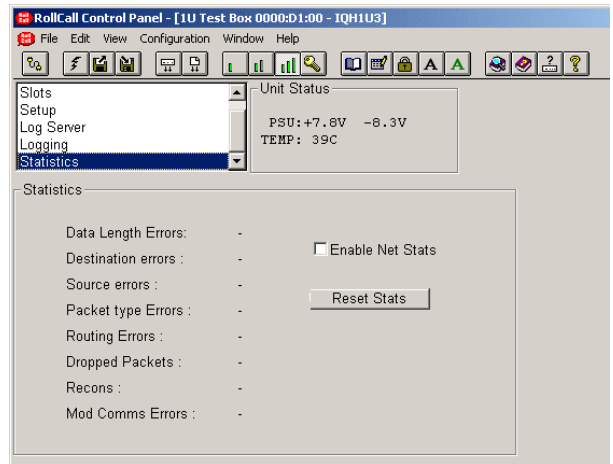
This item indicates any errors occurring during the communication of connection data in the Rollcall network.

Condition	Error value
Normal	0 or constant value
Fault	Value increases at an unacceptable rate. Errors occur on a regular basis

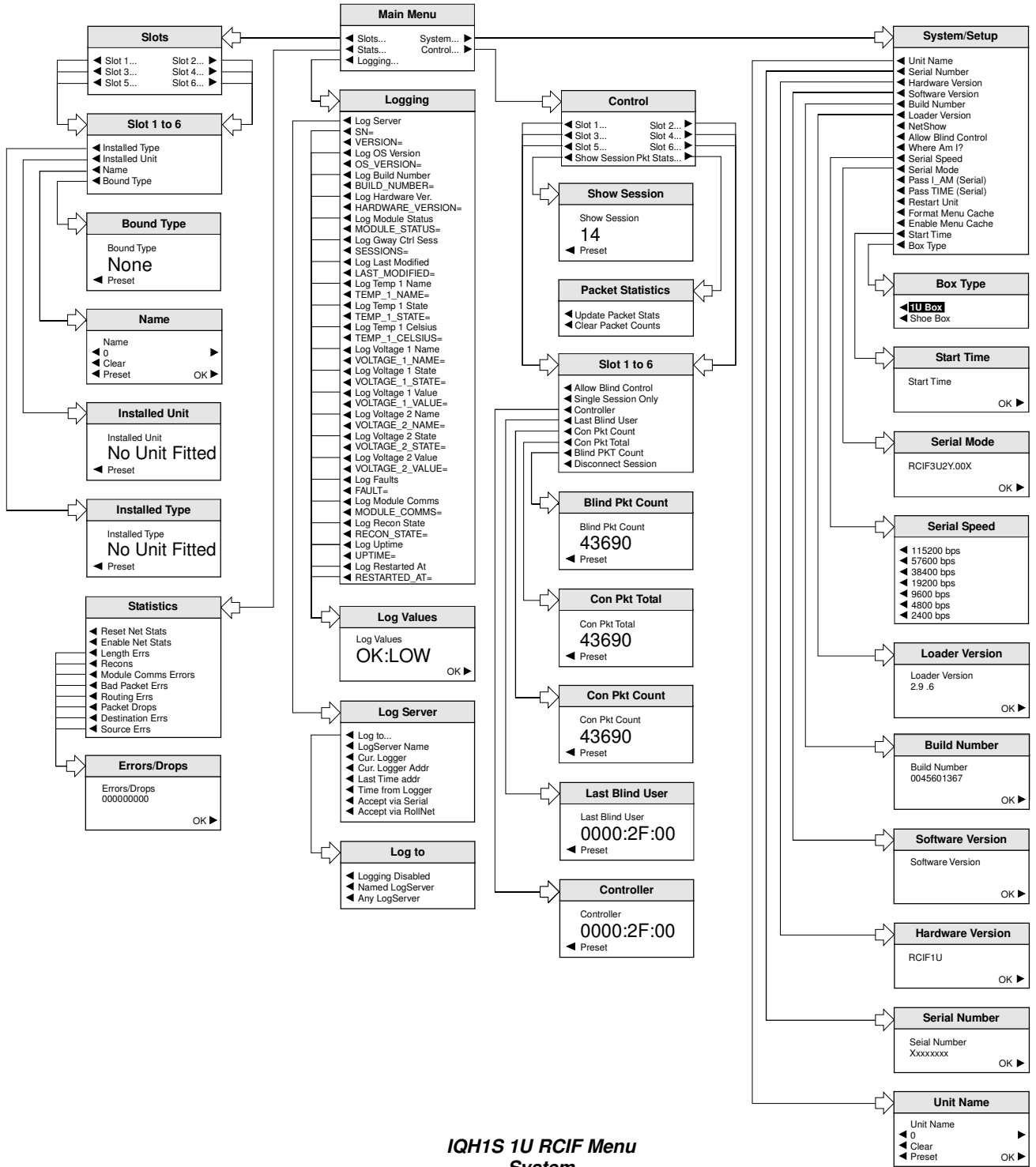
Possible Faults

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

Please refer to *RollCall System Integrators Manual*.



IQH1S Enclosure RCIF Setup via the Front Panel Menu System



THE IQH1S ENCLOSURE RCIF MENU SYSTEM

(See drawing on previous page)

GENERAL INFORMATION

The RCIF Menu System allows access to setting of RCIF system parameters. All operational parameters and selections may then be made using a system of menus displayed in two LCD windows. Menus are selected by push buttons and further menu selections made by rotating a spinwheel and pressing a push button.

The spinwheel also allows continuously variable parameters, (where applicable) to be adjusted and the settings seen in the LCD window.

Various specific operations may be also be achieved by operating dedicated push buttons.

RCIF Menu Details

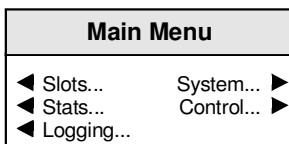
To access this menu level, press the Modules button on the front panel. This will reveal a scrollable list of modules. Press the left-hand button adjacent to the desired module. The RCIF main menu will be revealed.

The main or top level menu allows various sub-menus to be selected by pressing the button adjacent to the required text line.

Note that where a menu item is followed by three dots (...) this indicates that a further sub-menu may be selected.

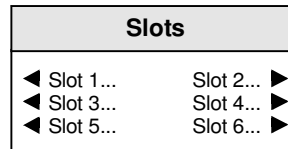
Whenever a menu item is selected the parameters of that selection will be displayed in the Information window of the front panel. Where the selection is purely a mode selection and does not enable a sub-menu, the text will become reversed (white-on-black) indicating that the mode is active. If the mode is not available for selection the text will remain normal.

THE MAIN MENU

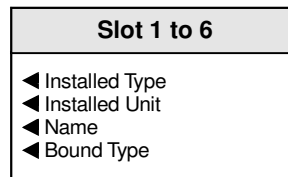


Slots

This function allows each slot to be named and interrogated.



Selecting a slot will reveal the following options for the slot:



Installed Type



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

Installed Unit

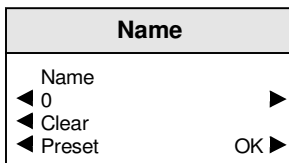


This shows what is fitted in the slot.

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, as defined by matching Installed Unit ID and Bound Type ID.

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. Although the values in this edit box remains the same. When this entry is edited, the current Installed Unit ID gets copied to the Bound Type ID.



To compile/edit the text the right ► and left ◀ buttons adjacent to the upper text line in the menu should be used to select the character position in the text (this character will be in reversed flashing text) and the spinwheel should then be used to select the character.

When the desired character is found the button to the left or right of the text line should be pressed and the next text character will be highlighted and available for changing.

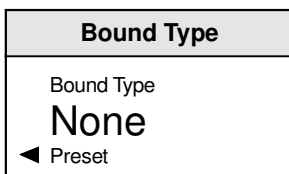
The ◀ **Clear** function blanks out the selected character.

The ◀ **Preset** function loads the default name text.

O.K. ► saves the text and returns to the previous menu.

Bound Type

The Bound Type function allows the slot to be associated with a particular type of module (e.g. a encoder type 284).



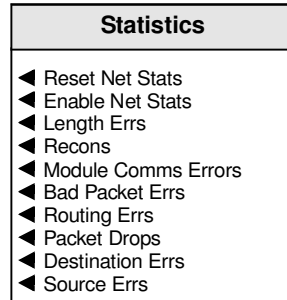
If a module matching this type ID is fitted, the Gateway will use the user given name. If an incorrect card type is installed in the slot the RollCall ID will not be correct and the actual card type will be displayed in the module browser.

The names and types may be setup before the installation of the modules. Edit the Bound Type ID after editing the Editable Name.

Statistics

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

In the event of a problem these error messages may be quoted to assist debugging.



Reset Net Stats

Selecting this function will reset all statistics to zero.

Enable Net Stats

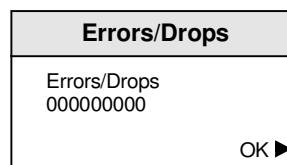
This item must be checked to enable the errors to be updated.

Error Definitions (general)

Condition	Error value
Normal	0 or constant value
Fault	Value increases rapidly

Errors/Drops

When an error item is selected this window will display the error count.



Recons.

This item indicates any errors occurring during the communication of connection data in the Rollcall network.

Condition	Error value
Normal	0 or constant value
Fault	Value increases at an unacceptable rate. Errors occur on a regular basis

Possible Faults

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

Please refer to *RollCall System Integrators Manual*.

Logging

This menu determines the information made available for logging.

Logging
◀ Log Server
◀ SN=
◀ VERSION=
◀ Log OS Version
◀ OS_VERSION=
◀ Log Build Number
◀ BUILD_NUMBER=
◀ Log Hardware Ver.
◀ HARDWARE_VERSION=
◀ Log Module Status
◀ MODULE_STATUS=
◀ Log Gway Ctrl Sess
◀ SESSIONS=
◀ Log Last Modified
◀ LAST_MODIFIED=
◀ Log Temp 1 Name
◀ TEMP_1_NAME=
◀ Log Temp 1 State
◀ TEMP_1_STATE=
◀ Log Temp 1 Celsius
◀ TEMP_1_CELSIUS=
◀ Log Voltage 1 Name
◀ VOLTAGE_1_NAME=
◀ Log Voltage 1 State
◀ VOLTAGE_1_STATE=
◀ Log Voltage 1 Value
◀ VOLTAGE_1_VALUE=
◀ Log Voltage 2 Name
◀ VOLTAGE_2_NAME=
◀ Log Voltage 2 State
◀ VOLTAGE_2_STATE=
◀ Log Voltage 2 Value
◀ VOLTAGE_2_VALUE=
◀ Log Faults
◀ FAULT=
◀ Log Module Comms
◀ MODULE_COMMS=
◀ Log Recon State
◀ RECON_STATE=
◀ Log Uptime
◀ UPTIME=
◀ Log Restarted At
◀ RESTARTED_AT=

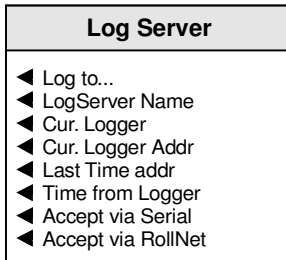
The value of the selected Log item will be displayed in the window as shown below:

Log Values
Log Values OK:LOW OK ▶

For details of Logging Fields please see page 27.

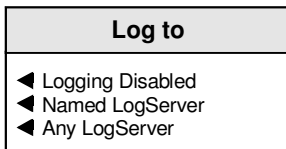
Log Server

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



Log to...

This menu allows the logging connection to be setup.



Logging Disabled

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

Named LogServer

If this item is selected Logging information will only be sent to the server named in the name window.
Note: matching of the name is case sensitive.

Any LogServer

If this item is selected 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

LogServer Name

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

Cur. Logger

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

Cur. Logger Addr

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

Last Time Addr

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

Time From Logger

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

Accept via Serial

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

Accept via RollNet

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

System/Setup

This function allows various system functions to be set up.

System/Setup
◀ Unit Name
◀ Serial Number
◀ Hardware Version
◀ Software Version
◀ Build Number
◀ Loader Version
◀ NetShow
◀ Allow Blind Control
◀ Where Am I?
◀ Serial Speed
◀ Serial Mode
◀ Pass I_AM (Serial)
◀ Pass TIME (Serial)
◀ Restart Unit
◀ Format Menu Cache
◀ Enable Menu Cache
◀ Start Time
◀ Box Type

Unit Name

Unit Name
Unit Name
◀ 0 ▶
◀ Clear ▶
◀ Preset OK ▶

This allows the unit to be given a meaningful name.

Serial Number

Serial Number
Seial Number
Xxxxxxx OK ▶

This shows the serial number of the unit.

Hardware Version

Hardware Version
RCIF1U
OK ▶

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

Software version

Software Version
Software Version
OK ▶

This shows the software version installed.

Build Number

Build Number
Build Number
0045601367
OK ▶

This shows the software build number of the unit.

Loader Version

Loader Version
Loader Version
2.9 .6
OK ▶

This shows the version of the gateway software loader. [The loader operates at start up only, validating all gateway files before the main application runs]

Net Show

This function allows a unit to be 'hidden' from the network system. Pressing the adjacent button will toggle the text from normal to reversed.

When the text shows as normal the previously selected unit will not appear in the Module List displayed on other control panels in the system.

When the text is reversed the unit will appear in the Module List displayed on other control panels in the system.

When netshow is active the unit broadcasts its presence.

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

Allow Blind Control

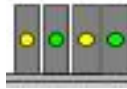
Blind Control is the ability to control a unit without a connection. Active Front Panels and RollCall PC programs use a RollCall connection to control a module. RollTrack (used for setting, for example, audio delay times to track video delays) does not use a connection, but just sets the delay.

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. Note, if upgrading the gateway software, you must enable Blind Control.

Where Am I?

TX and RX LED's



This allows the 1U enclosure to be physically located in a large system.

When this function is selected the TX and RX LED's on the gateway card will flash.

Serial Speed

This group allows the serial port speed to be selected.

Serial Speed
◀ 115200 bps
◀ 57600 bps
◀ 38400 bps
◀ 19200 bps
◀ 9600 bps
◀ 4800 bps
◀ 2400 bps

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.

Serial Mode

This item shows the current operating mode of the serial port (RS422, RS232 or RS485).

Serial Mode
RCIF3U2Y.00X
OK ▶

Pass I_AM (Serial)

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.

Pass TIME (Serial)

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).

Restart Unit

Selecting this function will re-boot the Gateway system with any changes incorporated. This will terminate any connections to the Gateway and to modules in the 1U frame. This provides an easier alternative to a power-down power-up operation.

Format Menu Cache

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

Enable menu Cache

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

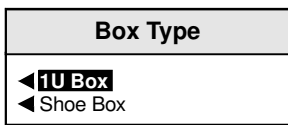
Start Time

This shows the date and time that the unit was last restarted.



If the gateway has never received a TimeStamp since restart, this field is left blank. *Note that this always shows GMT (Greenwich Mean Time).*

Box Type

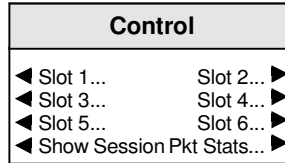


This item allows the 1U enclosure to be configured as a ShoeBox.

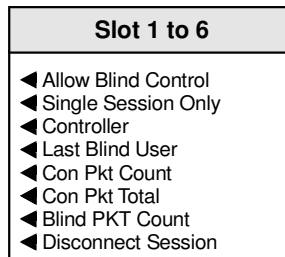
Note that when the ShoeBox selection is made the templates will be different and some items will only be usable if the 1U enclosure is controlling the selected box type.

Control

This function displays information about the controllers for each slot.



Any of the 6 slots may be interrogated and the following information displayed.



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.

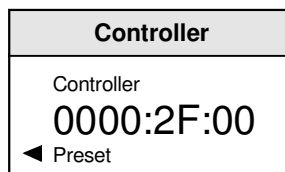
If Blind Control is not used then Allow Blind may be disabled, giving protection against incorrectly set-up RollTrack sources.

Single Session Only

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

Controller

This displays the address of the connected controllers.



The Show Session control can be used to scroll through the connected controllers.

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

Last Blind User

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

Last Blind User
Last Blind User 0000:2F:00 ◀ Preset

Con(troller) Packet Count

Con Pkt Count
Con Pkt Count 43690 ◀ Preset

Con(troller) Packet Total

This displays the total number of control packets from the currently selected connected controller and from all connected controllers.

Con Pkt Total
Con Pkt Total 43690 ◀ Preset

Blind Packet Count

This displays the number of blind control packets of the blind controller address.

Blind Pkt Count
Blind Pkt Count 43690 ◀ Preset

Show Session

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

Show Session
Show Session 14 ◀ Preset

Packet Statistics

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

Packet Statistics
◀ Update Packet Stats ◀ Clear Packet Counts

Update Packet Stats

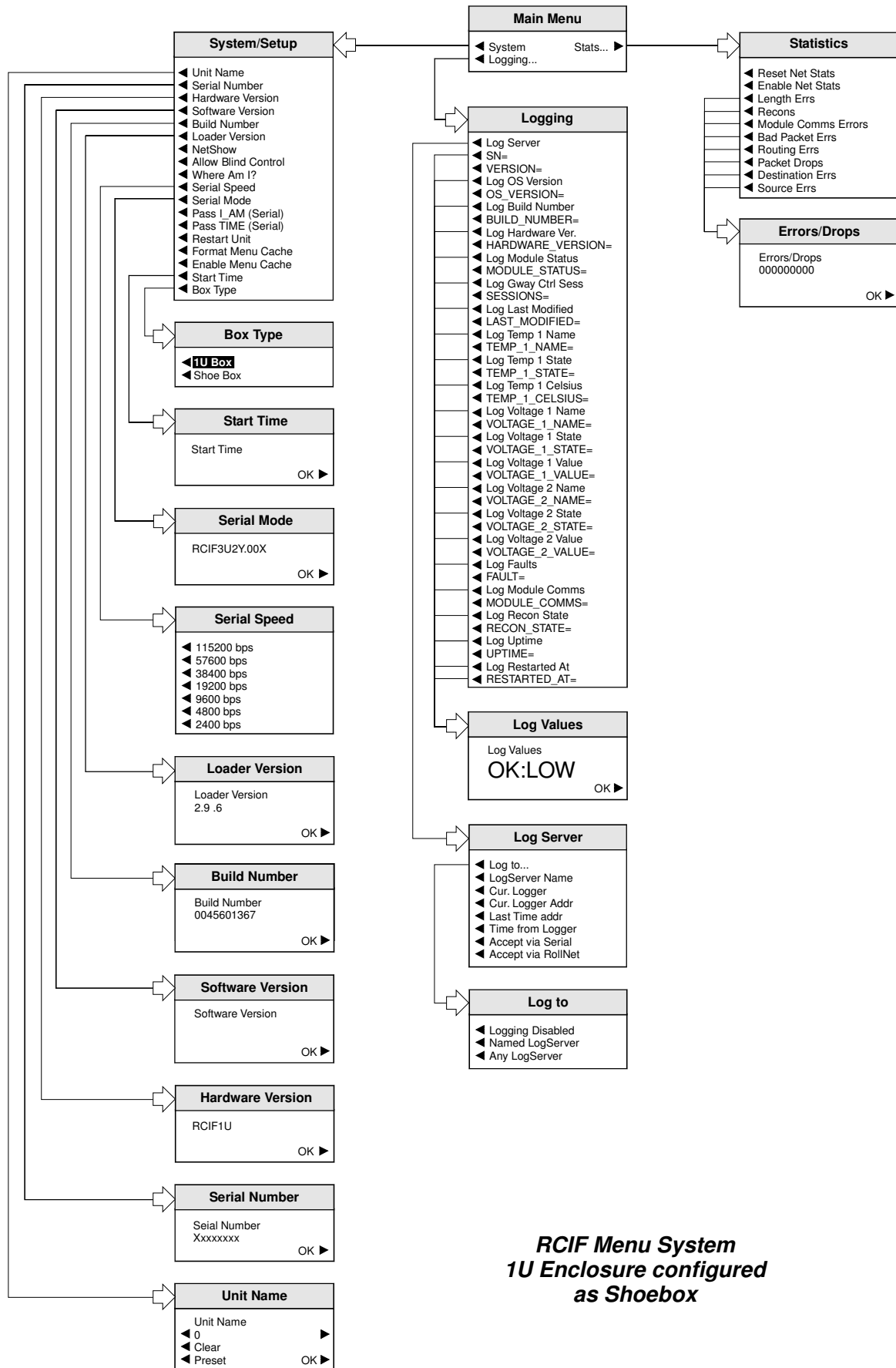
When selected the packet counts will be updated. When unselected the packet counts the packet counts will be replaced with dashes (-).

*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.***

Clear Packet Counts

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

Menu System - 1U Enclosure Configured as a Shoebox



**RCIF Menu System
1U Enclosure configured
as Shoebox**