



**Snell
Advanced
Media**

IQASI25 User Manual

ASI Transport Switch and Distribution Amplifier

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Safety Information

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



- 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



- 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 in el original-)
- AZUL conectado a N (Conductor Neutro -Neutral in el original-)
- MARRÓN conectado a L (Conductor Fase -Live in el original-)



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

Simboli di sicurezza:



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

Attenzione:



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

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

Connessione elettrica nei paesi diversi dagli Stati Uniti

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

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



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

Förklaring av Säkerhetssymboler



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

Säkerhetsvarningar



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

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

Strömkontakter i länder utanför USA

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

GRÖN/GUL ledning ansluten till E (Skyddsjordad ledare)

BLÅ ledning ansluten till N (Neutral ledare)
BRUN ledning ansluten till L (Fas ledare)



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

Forklaring på sikkerhedssymboler



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

Sikkerhedsadvarsler



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

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

Nettilslutning i andre lande end USA

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

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



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

Turvamerkkien selitys



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

Turvaohjeita



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

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

Sähkökytkentä

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

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



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

Σύμβολα de Segurança



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

Avisos de Segurança

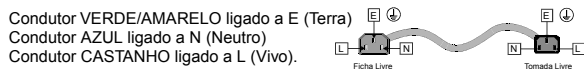


As instruções de manutenção fornecidas são para utilização de técnicos qualificados. Para reduzir o risco de choque eléctrico, não devem ser realizadas intervenções no equipamento não especificadas no manual de instalações a menos que seja efectuadas por técnicos habilitados.

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

Ligação da alimentação noutros países que não os EUA

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



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

Επεξήγηση των Συμβόλων Ασφαλείας



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



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

Προειδοποίηση Ασφαλείας

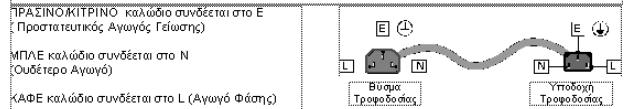


Οδηγίες επισκευής, όπου παρέχονται, αναφέρονται αποκλειστικά και μόνο σε εξειδικευμένο προσωπικό. Για να μειωθεί ο κίνδυνος ηλεκτροπληξίας, μην εκτελέτε επισκευές παρά μόνο τις συμπεριλαμβανόμενες στο εγχειρίδιο των οδηγιών, εκτός και αν έχετε τα απαραίτητα προσόντα για να το κάνετε. Όλες οι επισκευές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

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

Σύνδεση τροφοδοσίας σε χώρες εκτός των ΗΠΑ

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



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

Laser Safety

This product operates with Class 1 laser products.



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

Ventilation

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



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

Safety Standards

This equipment conforms to the following standards:

EN60950-1 2006 + A11: 2009

Safety of Information Technology Equipment Including Electrical Business Equipment.

UL1419 (3rd Edition) - UL File E193966

Standard for Safety – Professional Video and Audio equipment.



EMC Standards

This equipment conforms to the following standards:

EN 55032:2012 (Class A)

Electromagnetic Compatibility of Multimedia Equipment - Emission Requirements.

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

Limits for Harmonic Current Emissions

EN 61000-3-3:2013

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

FCC/CFR 47:Part 15, Class A

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

EMC Environment

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



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

EMC Performance of Cables and Connectors

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

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

Coaxial Cables

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

D-type Connectors

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

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1. Introduction

1.1 Description

The IQASI25 is a single-width ASI 2 to 1 switch, distribution amplifier and transport stream monitor with 5 re-clocked outputs. It has non-equalized transformer coupled inputs and non-transformer coupled outputs.

2 GPIO ports are available which may be configured as inputs or outputs and switch on input loss for example, to be used by other external products. The IQASI25 provides for full RollCall control.

Note: Transport Stream switching is of a "dead" type. Seamless and near-seamless switching are not supported. If the IQASI25 is forced to a given input, this will take place irrespective of its input state.

1.2 Block Diagram

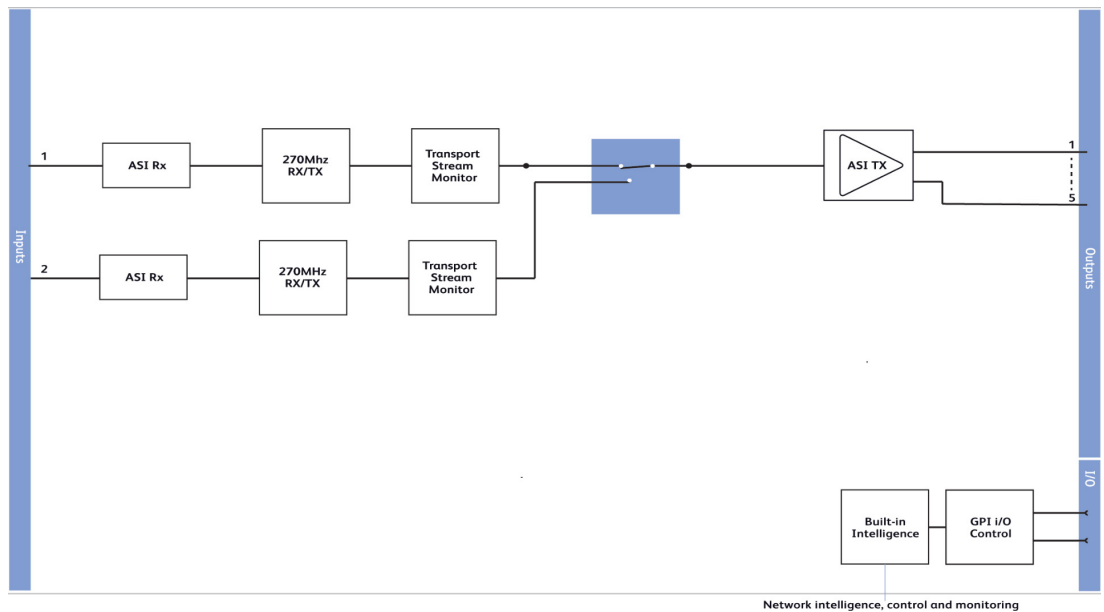


Figure 1 Block Diagram for IQASI25

1.3 Feature Summary

The IQASI25 ASI Monitor & Switched distribution Amplifier provides the following features:

- DVB-ASI, EN50083-9 Transport Stream monitoring.
- Detection and logging of signal loss.
- Automatic input switching on error.
- Equalized and transformer coupled input.
- 5 re-clocked, non-transformer coupled outputs.
- 2 configurable GPIO ports.
- RollCall monitoring allows all signal paths to be managed remotely.

1.4 Rear Panel

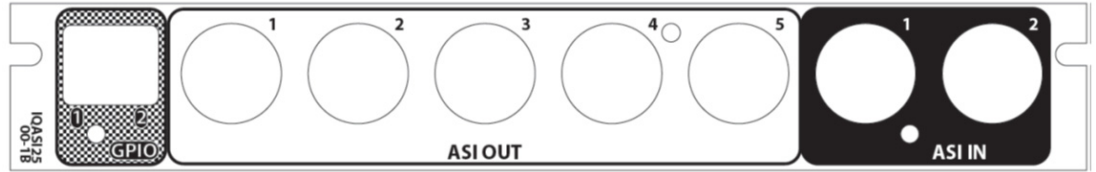


Figure 2 IQASI25 Rear

1.5 Order Codes

Note: Modules with "B" order codes (for example, IQASI2510-2B3) can be fitted into B-type enclosures only. See section for information on enclosures.

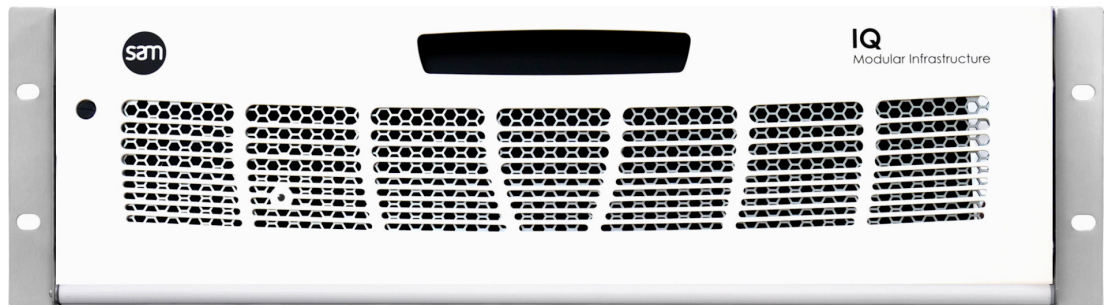
The following product order codes are covered by this manual:

IQASI2500-1B3 ASI monitor and switched DA

1.6 Enclosures

The IQASI25 module fits the IQH3B enclosure shown below.

1.6.1 B-Style Enclosure



Enclosure order codes: IQH3B-S-0, IQH3B-S-P

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

1.7 Power Ratings

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

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

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

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

1.7.1 Power Ratings and Card Widths

Product	Width	PR
IQASI25	1	4.5PR

2. Technical Specification

Inputs/Outputs	
Signal Inputs	
Inputs	2 x ASI TS (270MBit/s)
Connector/Format	BNC 75ohm panel jack
Conforms to	EN50083-9
Input Cable Length	100m (image 1000HD)
Signal Outputs	
Outputs	5 x ASI TS (270MBit/s)
Connector/Format	BNC 75ohm panel jack
Conforms to	EN50083-9
Control Interface	
GPI	2
Connector/Format	Standard SAM screw terminal
GPI	Opto input 2.2K Ω to +5V, (1.6mA to ground)
GPO	Relay rated 1A @ 30V DC switching to ground
Indicators Front Panel and Card Edge	
Power	OK (Green)
CPU	OK (Green flashing)
Input Status 1	Fail (Red)
Input Status 2	Fail (Red)
Auto	Green when selected
Output Source 1	Yellow when selected
Output Source 2	Yellow when selected
RollCall Features	
Status	Input and output alarm status
Input	Input select: Auto, Forced or GPI based
GPIO	GPIO configuration
User Memories	16
Logging	Input status Input alarms Output status Misc
RollTrack Controls	On/off, index, source, address, command, status, sending
Setup	Versions, reset defaults, restart

Electrical

Data Format	ASI transport stream
-------------	----------------------

Connector/Format	BNC, standard SAM screw terminal
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Power Consumption

Module power consumption	4.5 PR
--------------------------	--------

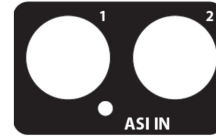
Note: For information on IQH3B enclosures, see the IQH3B user manual.

3. Connections

This section describes the physical input and output connections provided by the IQASI25.

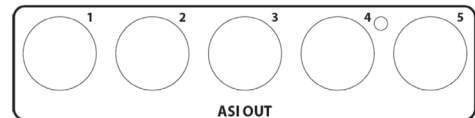
3.1 ASI Inputs

2 x inputs using 75R BNC.



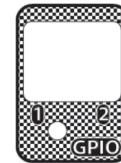
3.2 ASI Outputs

5 x outputs using 75R BNC.



3.3 GPIO

2 x configurable GPIO connectors using screw terminals.



4. Card Edge LEDs

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

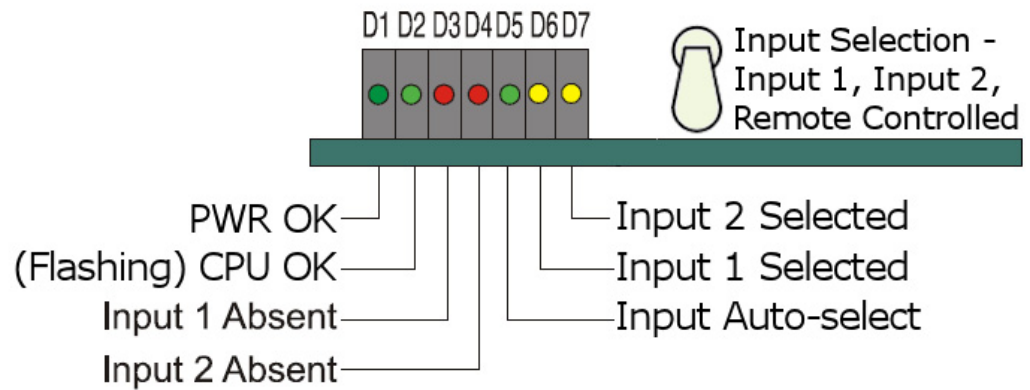


Figure 3 Card Edge LEDs

4.1 Rotary Switch

See section 5. for information on the rotary switch.

5. Operation Overview

The IQASI25 will normally remain locked to an input. If that input fails, and the module has been set to auto-select, an alternate input will be switched to.

If the alternate input has failed, no switch will occur.

Switching will take place if these events are encountered:


- **Loss of Carrier.**
- **Loss of TS (Transport Stream) Sync** - If two or more corrupted sync bytes are received, this will result in sync loss. Five consecutive correct sync bytes must be received before the alarm is cancelled. The presence of this alarm mutes the **Loss of PAT** alarm. **Loss of TS Sync** is always enabled, and is triggered by any of three items:
 - **TS_sync_loss.**
 - **Sync_ud_error** (no TS sync within 0.4 seconds).
 - 2 x ASI K28.5 between each TS packet rule violated.
- **Loss of PAT** - The Loss of PAT alarm is enabled/disabled via RollCall. The 16-position rotary switch (see section 4.1) is used to configure the PAT upper distance threshold according to the table below:

Setting	Time
0	0.5
1	0.1
2	0.2
3	0.3
4	0.4
5	0.5
6	0.6
7	0.7
8	0.8
9	0.9
10	1.0
11	1.2
12	1.4
13	1.6
14	1.8
15	2.0

- The alarm condition will be enunciated if there were no occurrences of TS Sync Loss in a rolling 1-second analysis window. The alarm's initial state is active, as TS sync is considered lost until it is acquired.

6. RollCall Control Panel

This section contains information on using the IQASI25 with RollCall.

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

6.1 Navigating Pages in the RollCall Template

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

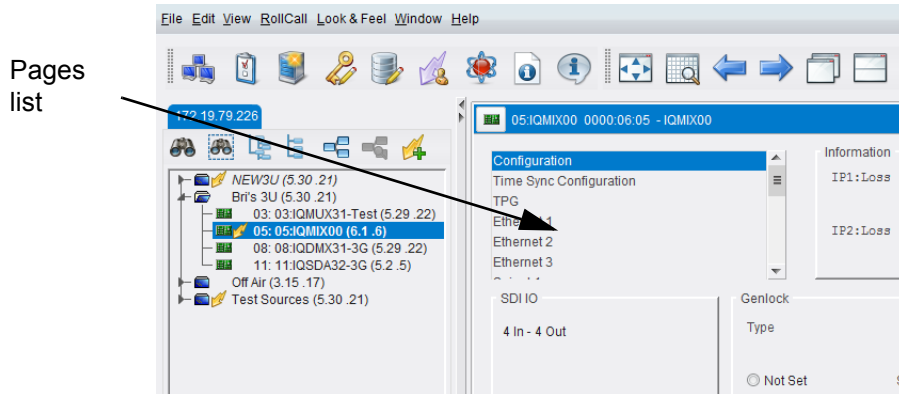


Figure 4 Template Pages


6.1.1 Template Pages


The following pages are available for the IQASI25 module. Please note that what is displayed on these pages is dependant on the module's capabilities and the privileges assigned to the user. So, the illustrations in this manual may differ somewhat from what is seen in your environment.

- **Status** - see section 6.3
- **Input** - see section 6.4.
- **GPIO** - see section 6.5.
- **Logging** - see section 6.6.
- **Memory 1-16** - see section 6.7.
- **RollTrack** - see section 6.8.
- **Logging Output Status** - see section 6.9.

6.1.2 Setting Values

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

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

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

6.2 Unit Status

The **Unit Status** pane provides information about the inputs, the switching state and the current mode.

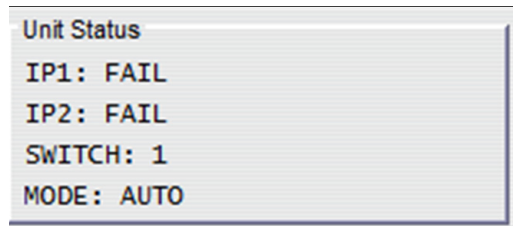


Figure 5 Unit Status Pane

Field	Description
IP1	Input 1 and its associated value. Values: OK, FAIL
IP2	Input 2 and its associated value. Values: OK, FAIL
Switch	Currently selected input. Values: 1 or 2
Mode	Mode module is currently in. Values: Local, Remote, Ext, Auto

6.3 Status

The **Status** page shows the status for the different sub-alarms for Channel 1 and Channel 2, and allows the PAT Alarm to be enabled or disabled.

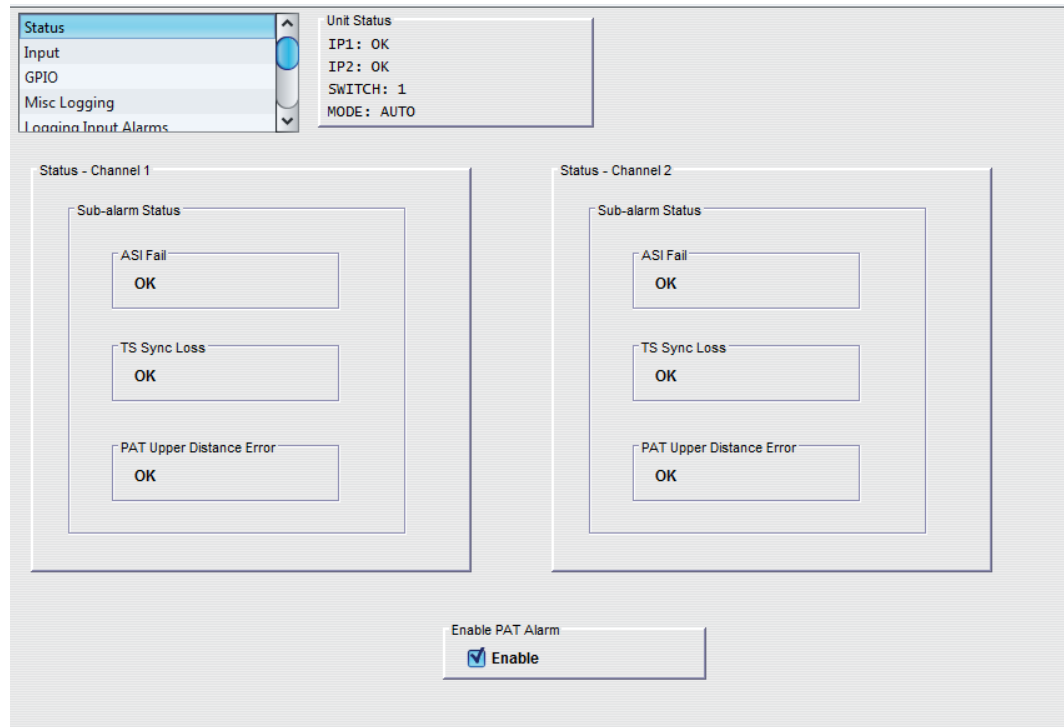


Figure 6 Status Page

6.3.1 Input Status

Each Channel has 3 alarms; any meeting the test condition will cause the input to switch. Each can have the states:

- On
- Fail

Alarm	Description
ASI Fail	Based upon loss of carrier.
TS Sync Loss	Five consecutive correct sync bytes are required for sync acquisition. Two or more corrupted sync bytes will result in sync loss. The alarm condition will be enunciated if there were no occurrences of TS Sync Loss in a rolling 1 second analysis window. The alarm's initial state is with the alarm being set (sounding) as TS sync is considered lost until acquired. The presence of this alarm mutes the PAT alarm.
PAT Upper Distance Error	The effect of the PAT Upper Distance Error alarm will be ignored if the Enable PAT Alarm control is NOT selected.

6.3.2 Enable PAT Alarm

Enables or disables the PAT threshold alarm..

6.4 Input

The **Input** page is used to name and select the input to be switched to the output.

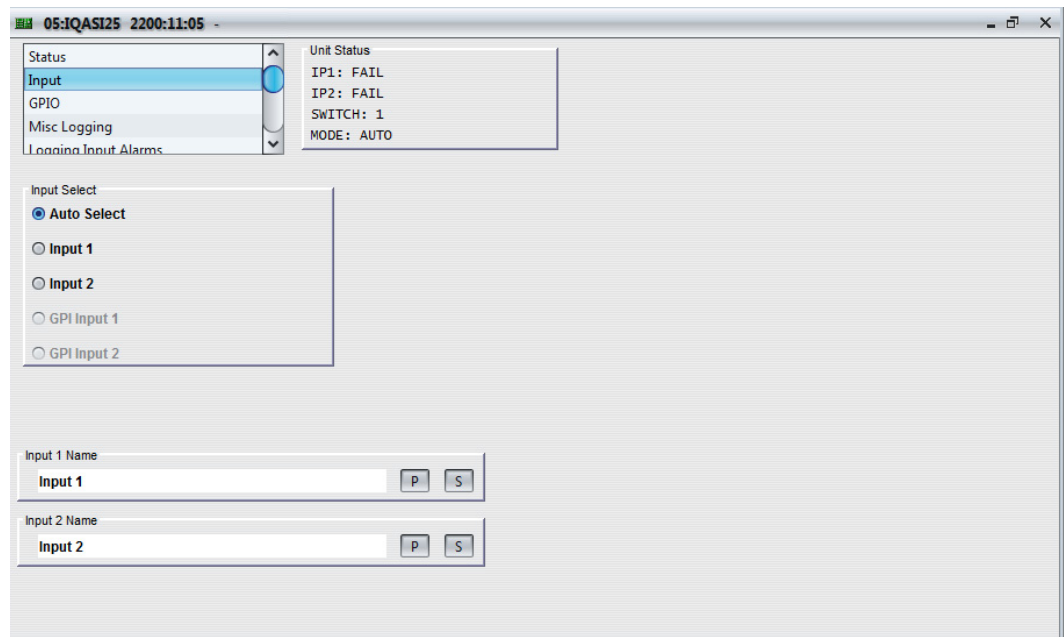


Figure 7 Input Page

6.4.1 Input Select

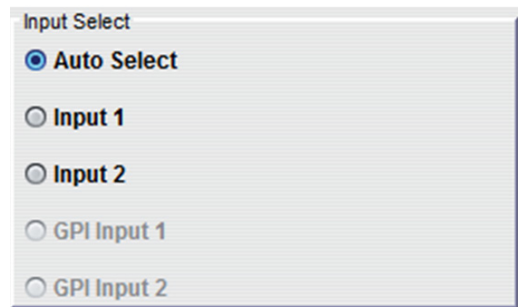
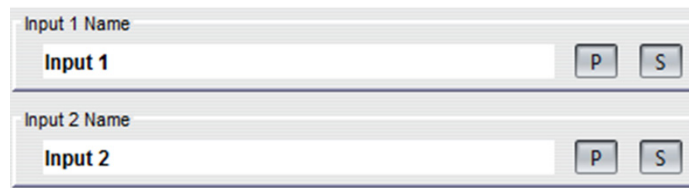


Figure 8 Input Select Pane

Selection	Description
Auto Select	The input is selected based on the chosen switching criteria and its current state.
Input 1	Input 1 Forced.
Input 2	Input 2 Forced.

6.4.2 Input *n* Name

This is where the input names displayed in **Logging Inputs** (see section 6.6.3) are defined.



The screenshot shows a software interface with two vertically stacked input name configuration sections. The top section is labeled 'Input 1 Name' and contains a text field with the text 'Input 1' and two buttons labeled 'P' and 'S'. The bottom section is labeled 'Input 2 Name' and contains a text field with the text 'Input 2' and two buttons labeled 'P' and 'S'.

Figure 9 Input Select Pane

To change the name of Input 1 or Input 2, type the name in the text field and click **S**. To return the name to its factory default, click **P**.

6.5 GPIO

The **GPIO** page allows GPIO connectors to be configured.

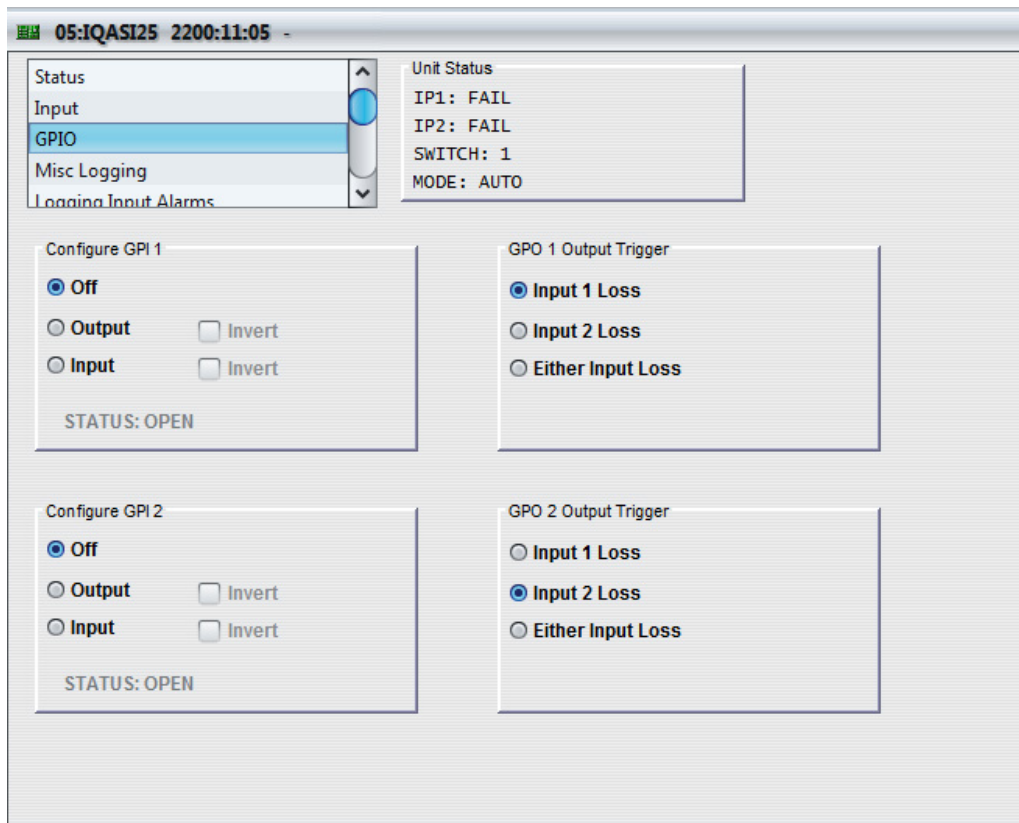


Figure 10 GPIO Page

6.5.1 Configure GPI *n*

This is where the GPI is configured as either input or output.

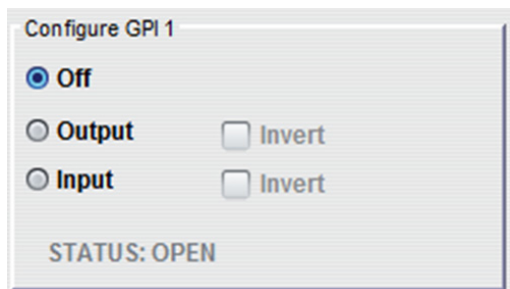


Figure 11 Configure GPI *n* Pane

Select as required.

6.5.2 GPO *n* Output Trigger

This is used to set when the GPO is asserted. Select as required.

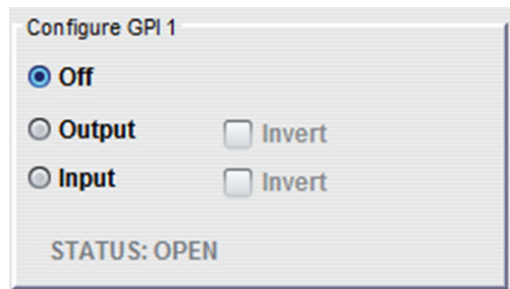


Figure 12 Configure GPI *n* Pane

Select as required.

6.6 Logging

Information about several parameters can be made available to a logging device that is connected to the RollCall network. Each logging page comprises three columns:

- **Log Enable** - Enable the check box for each parameter to be logged.
- **Log Field** - Displays the name of the logging field.
- **Log Value** - Displays the current log value.

6.6.1 Misc Logging

The **Misc Logging** page allows information on the module’s basic parameters to be logged. Enable check boxes as required..

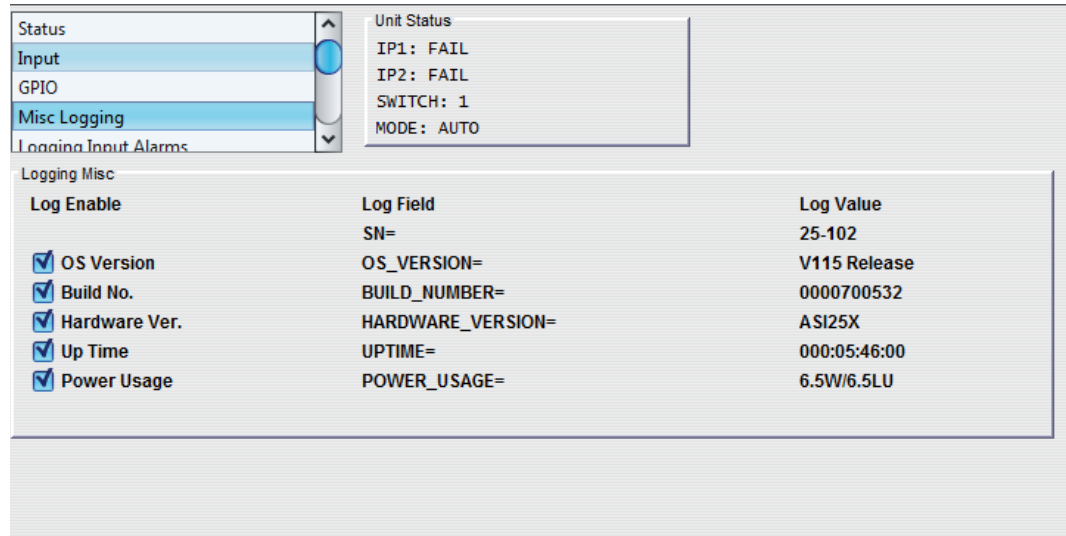


Figure 13 Misc Logging Page

Log Field	Description
OS_VERSION=	Reports the operating system name and version. For example, KOS V115.
BUILD_NUMBER=	Reports the build number.
HARDWARE_VERSION =	Reports the hardware version number.
UPTIME=	Reports the time since the last restart in the format ddd:hh:mm:ss.
POWER_USAGE=	Reports the power rating for the module. Note this is not a live power reading, but rather a maximum rating.

6.6.2 Logging Input Alarms

The **Logging Input Alarms** page is used to select which alarm fields should be enabled for each input.

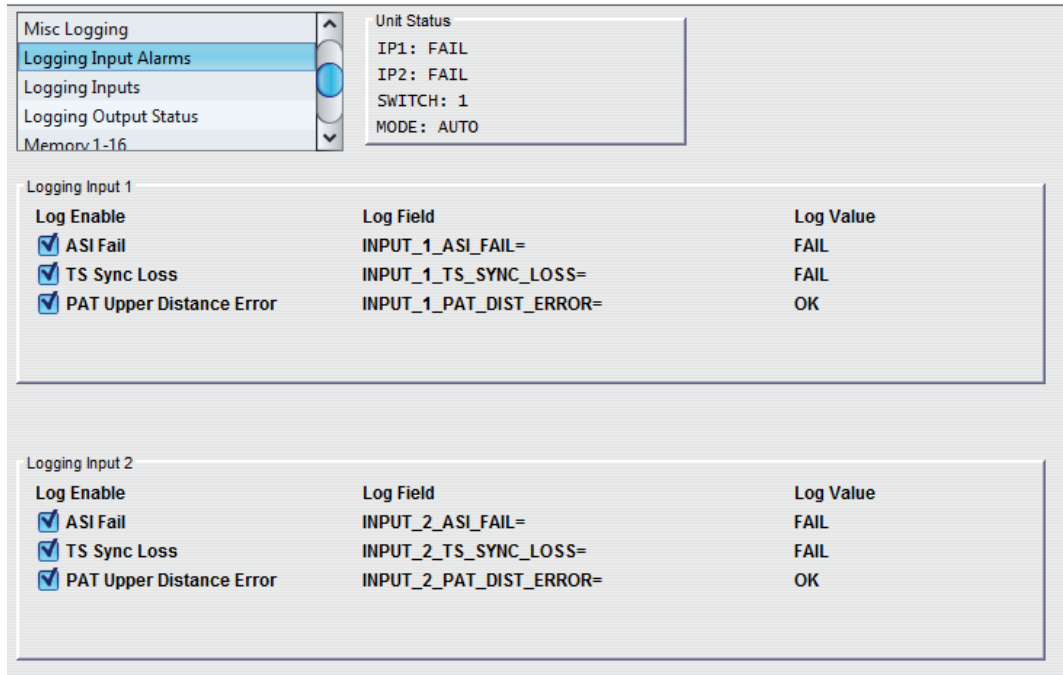


Figure 14 Logging Input Alarms Page

Alarms will indicate **Fail** if the parameter is outside of the alarm range, but will be acted upon only if the alarm is enabled. See section 6.3 for more information.

Log Field	Description
INPUT_N_ASI_FAIL=	Reports loss of ASI input. Possible values are: <ul style="list-style-type: none"> • OK • FAIL
INPUT_N_TS_SYNC_LOSS=	Reports loss of input transport stream sync. Possible values are: <ul style="list-style-type: none"> • OK • FAIL
INPUT_N_PAT_UD_ERROR=	Reports PAT Upper Distance error encountered. Possible values are: <ul style="list-style-type: none"> • OK • FAIL

Where N is the input number.

6.6.3 Logging Inputs

The **Logging Inputs** page is used to select which alarm fields should be enabled for each of the two inputs.

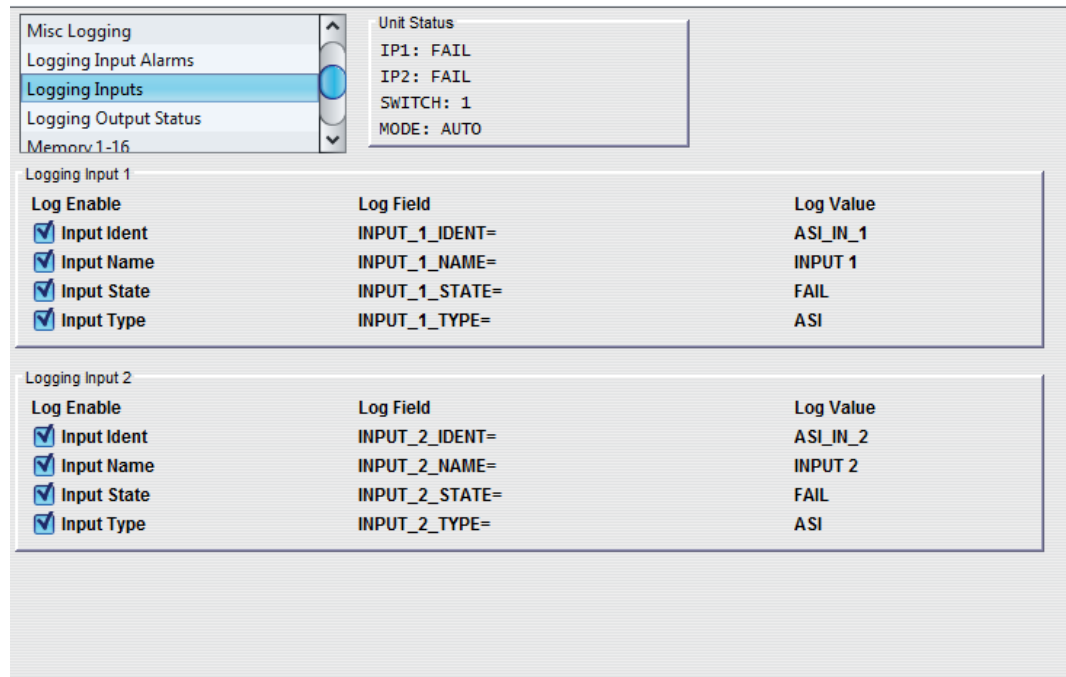


Figure 15 Logging Inputs Page

Log Field	Description
INPUT_N_IDENT=	A system-defined identifier for the input, based on the rear ID.
INPUT_N_NAME=	Name of the input, as defined on the Setup page (see section 6.9).
INPUT_N_STATE=	Possible values are: <ul style="list-style-type: none"> OK: input signal good. FAIL: input signal not detected.
INPUT_N_TYPE=	ASI

Where N is the input number.

6.6.4 Logging Output Status

The **Logging Output Status** page is used to select which alarm fields should be enabled for the output.

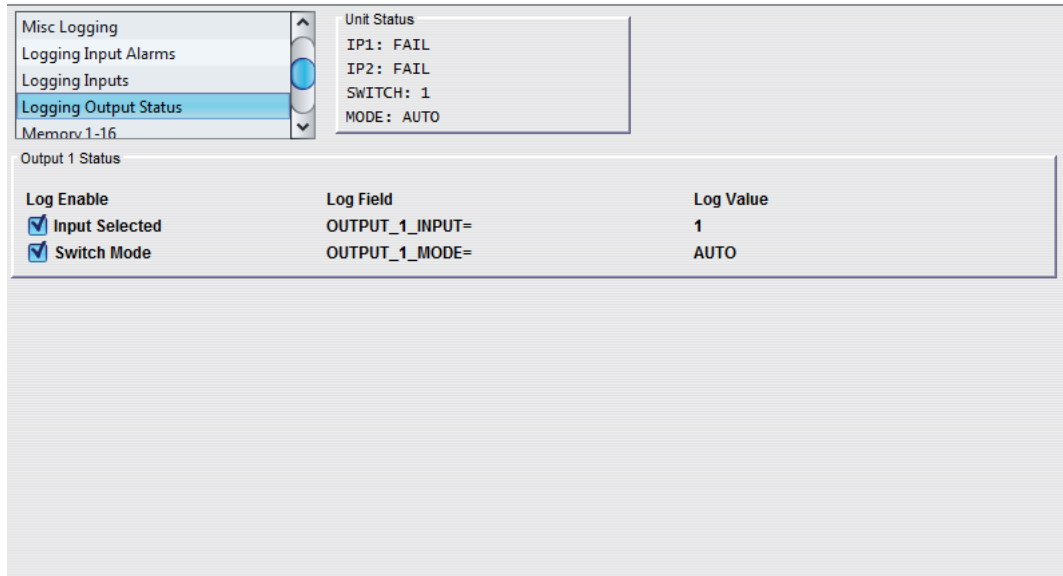


Figure 16 Logging Output Status Page

Log Field	Description
OUTPUT_N_INPUT=	Source selected for the output. Possible values are: <ul style="list-style-type: none"> • 1 • 2
OUTPUT_N_MODE=	Reports the switching mode in use. Possible values are: <ul style="list-style-type: none"> • REMOTE: Forced switching • AUTO: Decision-based switching • LOCAL: Front panel switching • EXT: GPI switching

Where N is the input number.

6.7 Memory 1-16

The **Memory 1-16** page allows the user to save the present configuration to memory, or to recall a configuration saved previously. Each save memory has a default name that can be changed to a more meaningful description if required.

Note: User memories do not recall log field states - that is, whether a log value has been enabled or disabled.
User memories will also not recall RollTrack settings.

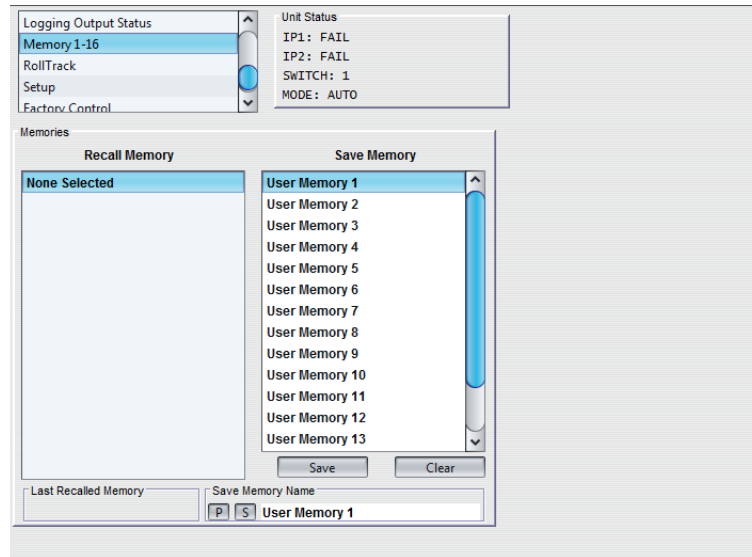


Figure 17 Memory 1-16 Page

6.7.1 Recall Memory

This lists the settings that have been previously saved. If no settings have been saved, None Selected is displayed.

To recall the settings saved in a memory:

In the **Recall Memory** column, click the memory to recall. The recalled settings will be applied and the memory name will be displayed in the **Last Recalled Memory** field.

6.7.2 Save Memory

This field lists the 16 preset memory names that are available for use.

To save settings:

- In the **Save Memory** pane, select a memory location and click **Save**. The current settings are saved and the memory is displayed in the **Recall Memory** column.

To clear a memory location:

- In the **Save Memory** pane, select a memory location, then click **Clear**. The current settings stored for that memory are cleared. After you clear a memory location, it is removed from the **Recall Memory** list.

6.7.3 Last Recalled

The **Last Recalled** pane displays the most recently recalled memory. If any of the settings have been changed since it was recalled, an asterisk will be displayed after the memory name.

6.7.4 Save Memory Name

This option enables the preset memory names to be changed if required.

To change a memory name:

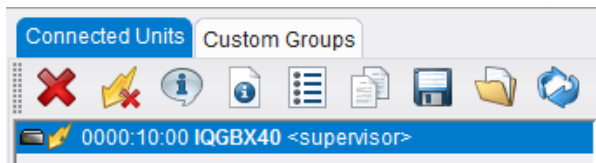
- In the **Save Memory Name** field, type the new memory name then click **S**. To return the memory to its default preset value, click **P**.


6.7.5 Savesets

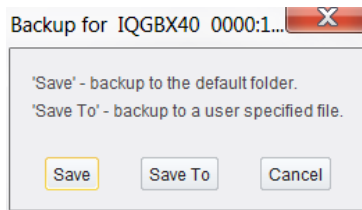
Savesets allow the user to save predetermined RollControl product field settings to file, which can then be used to either transfer the settings to another card, or used as a backup of the settings for that card.

6.7.5.1 Saving a Saveset

This is performed from the RollCall Control Panel **Connected Units** pane:




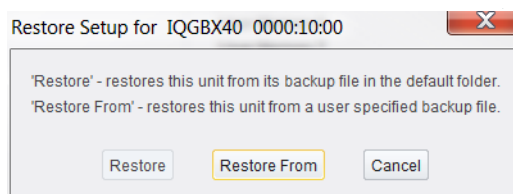
1. Click  to display the **Backup** dialog:



2. Click **Save** to save to the default folder, or **Save To** to save to a specified folder.

6.7.5.2 Restoring a Saveset

1. From the **Connected Units** pane, select the  icon; the **Restore** dialog is displayed:



Click **Restore** to restore from the default folder, or **Restore From** to restore from a specified folder.

6.8 RollTrack

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

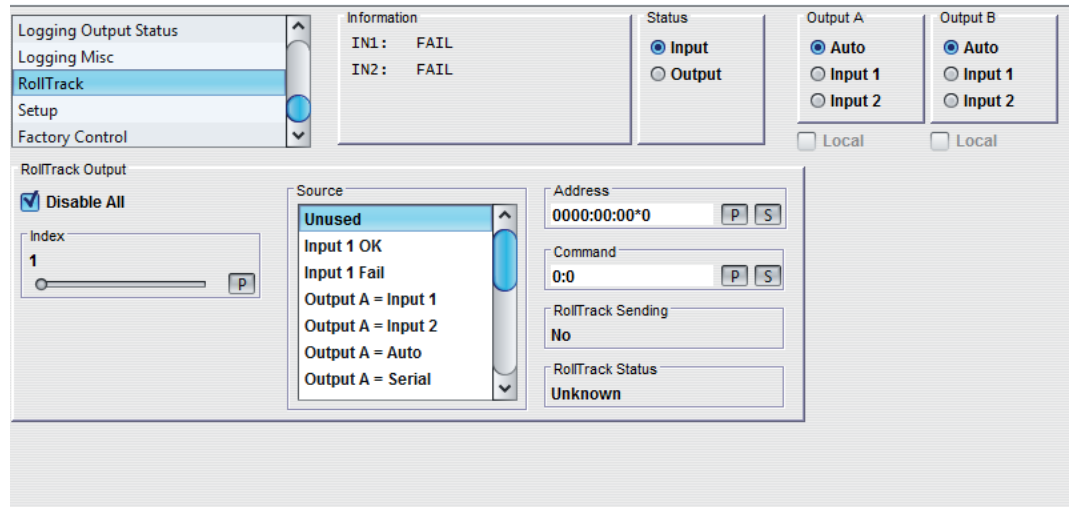


Figure 18 RollTrack Page

6.8.1 Disable All

When checked, all RollTrack items are disabled.

6.8.2 RollTrack Index

This slider enables up to 16 distinct RollTrack outputs to be set up. Dragging the slider selects the RollTrack **Index** number, displayed with the slider. Clicking **P** selects the default preset value.

6.8.3 RollTrack Source

This allows selection of the information source that triggers the transmission of data. Select the required RollTrack source from the list. Clicking **P** selects the default preset value.

When no source is selected, **Unused** is displayed.

RollTrack Source	Description
Unused	No RollTracks sent.
Input 1 OK	Input 1 is good.
Input 1 Fail	Input 1 is bad.
Input 2 OK	Input 2 is good.
Input 2 Fail	Input 2 is bad.

6.8.4 RollTrack Address

This allows the address of the selected destination unit to be set.

The address may be changed by typing the new destination in the text area then clicking **S** to save. Clicking **P** returns to the default preset destination.

A RollTrack address consists of four sets of numbers, for example **0000:10:01*99**:

- The first set (**0000**) is the network segment code number.
- The second set (**10**) is the number identifying the enclosure the module is in.
- The third set (**01**) is the enclosure slot number the module is in.
- The fourth set (**99**) is a user-definable unique identifier for the destination unit in a multi-unit system. This ensures that only the correct unit will respond to the command. If left at **00**, an incorrectly fitted unit may respond inappropriately.

6.8.5 RollTrack Command

This item enables a command to be sent to the selected destination unit.

The command may be changed by typing a code in the text area and clicking **S** to save. Clicking **P** returns to the default preset command.

The RollTrack command consists of two sets of numbers, for example: **84:156**:

- The first number (**84**) is the actual RollTrack command.
- The second number (**156**) is the value sent with the RollTrack command.

6.8.6 RollTrack Sending

A message is displayed here when the unit is actively sending a RollTrack command.

Possible messages are:

- **YES**: The message is being sent.
- **NO**: The message is not being sent.

6.8.7 RollTrack Status

A message is displayed here to indicate the status of the currently selected RollTrack index.

Possible RollTrack status messages are:

- **OK**: RollTrack message sent and received OK.
- **Unknown**: RollTrack message has been sent but has not yet completed.
- **Timeout**: RollTrack message sent but acknowledgement not received. This could be because the destination unit is not at the location specified.
- **Bad**: RollTrack message has not been correctly acknowledged at the destination unit. This could be because the destination unit is not of the type specified.
- **Disabled**: RollTrack sending is disabled.

6.9 Setup

The **Setup** page displays basic details of the module. You may be asked for these if you contact SAM technical support.

Facilities for restarting the module are also provided.

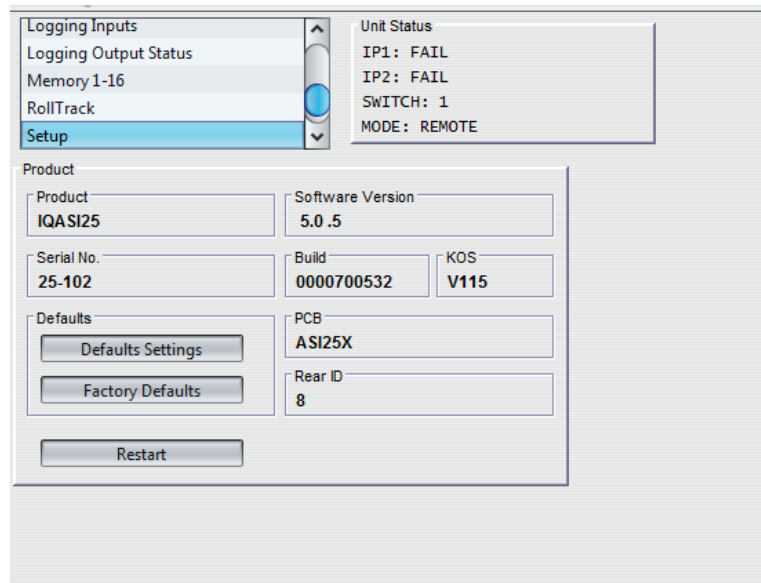


Figure 19 Setup Page

6.9.1 Defaults

Power-cycles the module, and allows the module to be reset to default settings.

Option	Operation
Default Settings	All controls are reset to their default values, except for user memories.
Factory Settings	All controls are reset to their default values, including user memories.
Restart	A soft restart is performed in order to re-initiate the Transport Stream Monitor.