Innovation from
Pro-Bel and Snell & Wilcox

The IQDCO is a passive changeover switch with SDI video presence detection.

# IQDCO

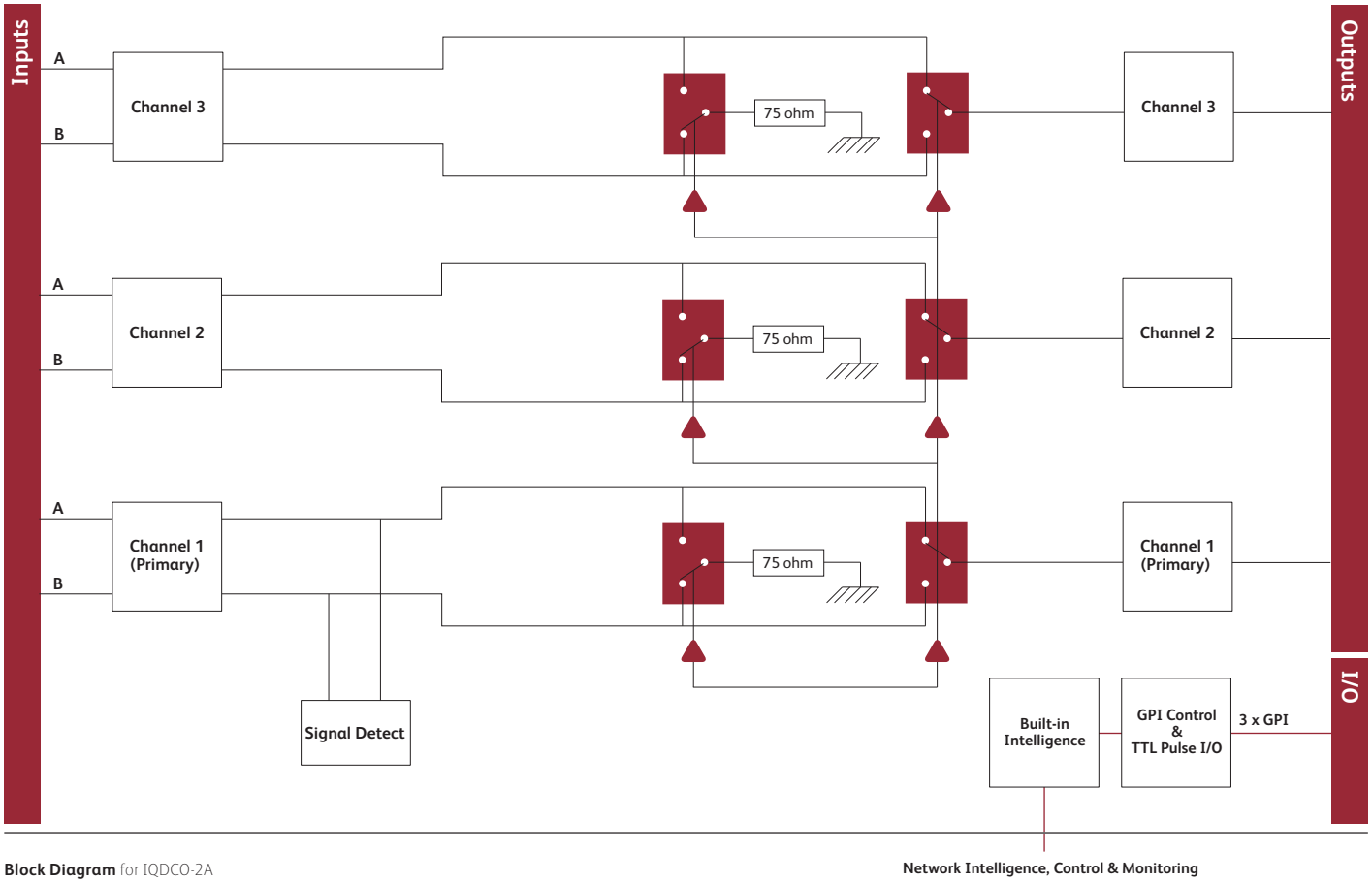
## SDI Changeover Switch

**Does this module suit your application?**

- Passive SDI changeover switch
- Detection of carrier, SDI lock, line standard, EDH and embedded audio /data presence
- Automatic switch over on programmable condition(s)
- Continuity (A input) maintained with power loss or module removal
- Three programmable GPI/O's for control or tally
- Programmable switch over time delay
- RollCall remote and card edge control
- RollCall fault logging
- Can be linked to trigger other changeover modules via RollTrack

**Why should you choose this module?**

- Ideal for conditions where switch over needs to be fully programmable. For example, carrier loss, the absence of embedded audio or any logical combination of conditions may trigger switchover
- Continuity (A input) maintained with power loss or module removal
- Three programmable GPI/O's for control or tally
- Programmable switch over time delay

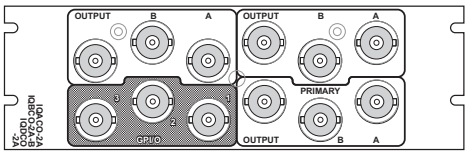



**Block Diagram** for IQDCO-2A

## Order codes for IQH3A/1A enclosures

**IQDCO-2A**
SDI Video changeover switch.
1 primary, 2 secondary switches.

**For more details on enclosure types please refer to datasheet IQH3A.**




IQDCO-2A

## Technical Specification

### Inputs and Outputs

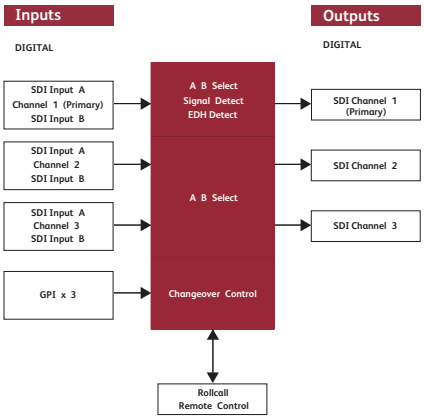
**Signal Inputs**

| | |
|---|---|
| Primary switch | 2 x SDI via BNC connectors |
| Standards | SMPTE 259M-C-1997 |
| Secondary switch | 2 per channel (2 channels) via BNC |

**Signal Outputs**

| | |
|---|---|
| Primary switch | 1 x SDI via BNC connector |
| Standards | SMPTE 259M-C-1997 |
| Secondary switch | 1 per channel (2 channels) via BNC |
| GPI I/O | 3 x closing contact via BNC |

**IQDCO SDI Changeover Unit**




### Card Edge and RollCall Controls

**Card Edge Controls (also available via RollCall)**

| | |
|---|---|
| Switch mode | Manual / Auto |
| Manual switch | A / B |
| EDH Reset | Resets error flags (both inputs) |
| Local | Selects default mode (cancels any RollCall programmed conditions) |

**Indicators**

| | |
|---|---|
| Power OK | |
| Input Loss A | |
| Input Loss B | |
| Audio presence A | At least one channel of embedded audio detected |
| Audio presence B | At least one channel of embedded audio detected |
| EDH A | Present; Error-Minute: Error-Hour |
| EDH B | Present; Error-Minute: Error-Hour |

**Functions Available via RollCall Only**

| | |
|---|---|
| Switch rules | Any logical combination of warnings and GPI triggers |
| GPI/O program | TALLY any input state or warning or set as trigger |
| Switch delay | 0 to 10 s from trigger condition(s) |
| Reporting and logging | Input Loss; Input Line Standard; EDH error; Audio and data presence |

### Specifications

**Signal Inputs**

**Primary SDI (x 2)**

| | |
|---|---|
| Input return loss | Better than 15 dB to 270 MHz (Output terminated) |
| Maximum cable length | >100 m PSF1/2 or equivalent Cable length is defined as input cable length + output cable length. |

**Secondary (2 Channels)**

| | |
|---|---|
| Input return loss | Better than –38 dB @ 5 MHz Note that the secondary switches are not guaranteed to work with 270 Mbit SDI signals, but may do so in some installations |

**Signal Outputs (Passive)**

**Primary**

| | |
|---|---|
| Output return loss | Better than 15 dB to 270 MHz (Inputs A and B terminated) |

**Secondary (2 Channels)**

| | |
|---|---|
| Output return loss | Better than –38 dB @ 5 MHz |
| GPI I/O (x 3) characteristics | Closing Contact Type<br>Output Sink Current 100 mA<br>Input Source Current 1 mA typical<br>Input Threshold Voltage 1 V typical |

**Power Consumption**

| | |
|---|---|
| Module power consumption | 3.9 W max |



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