

# IBU-240 - PRECISION TIMECODE DISTRIBUTION



## Dual Input, Fully Isolated 24 Output Precision Time Code Distribution Unit



AS9100D Certificate Number : C0210021-AS3



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## Product Overview



The IBU-240 is a high quality, precision dual source Timecode Distribution Unit for AC Timecode signals in the range 300Hz to 50KHz. Applications for the IBU-240 include reliable Timecode distribution in systems designed for satellite ground stations, secure military communications and range timing.

The IBU-240 base unit model has twenty-four isolated Timecode outputs available at the rear panel via BNC connectors reflecting to two (Ref A & Ref B) Timecode signal reference inputs feeding the transfer switch.

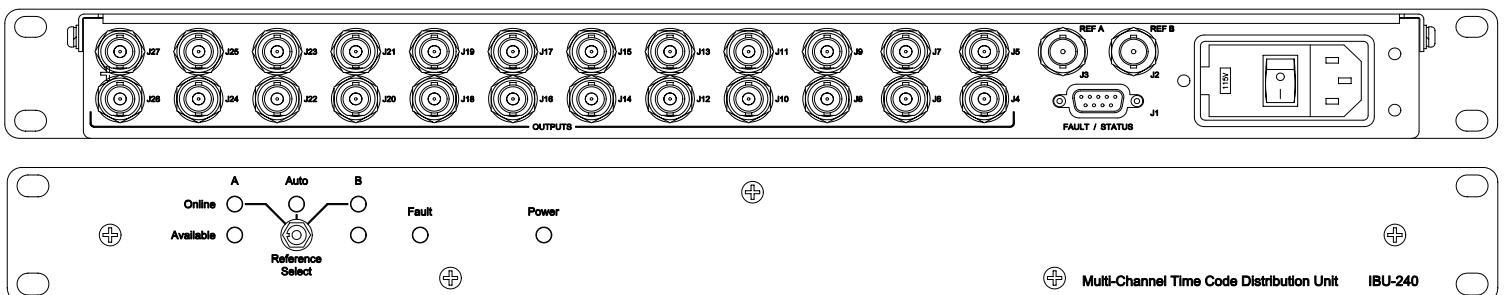
A three-position front panel switch facilitates the manual selection of either reference A or reference B or an automatic selection mode. When the automatic AUTO mode is selected the AUTO indicator will be illuminated and Input A will be used by default if it is viable. Should Input A fail then Input B will be chosen automatically.

Front panel indicators show the status of the inputs and which input has been selected along with a power status indication.

Each of the twenty-four outputs is continually monitored and should an output fail for any reason, then a group alarm Fault indicator will illuminate and trigger a rear panel discrete Fault alarm signal that may be used by external equipment to modify the reference and output signal routing and selection.

These units are built and tested to AS9100D aerospace quality standards and are trusted worldwide in high integrity critical signal applications.

Key Feature Summary	
<b>Options &amp; Features</b>	
<ul style="list-style-type: none"> <li>• Broad 300Hz to 50 KHz Isolated AC Time code inputs and outputs</li> <li>• One or two reference frequency signal inputs A or A &amp; B</li> <li>• Automatic reference changeover with reference select input option</li> <li>• Fault discrete inputs for external reference selection</li> <li>• Compact 1U, 19" rack mount with front panel status indication</li> </ul>	
<b>Signals</b>	
<ul style="list-style-type: none"> <li>• 24 discrete, fault tolerant, short circuit proof and fully monitored Timecode outputs on BNC connectors</li> <li>• Two Timecode reference signal inputs, A,B or both</li> <li>• Fault status indication and fault driven reference changeover</li> </ul>	



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## Specifications

Specifications - IBU-240	
<b>Reference Frequency Inputs</b>	<b>Details</b>
Connectors	2 x Rear panel BNC
Amplitude	4V pk-pk
Input Impedance	600 Ohms - transformer isolated
Frequency	In the range 300Hz to 50KHz
<b>Fault Sense and Transfer</b>	
Modes	Automatic or manual - In automatic, unit switches from Ref A to ref B if A fails
Number of inputs	2
Connector	9 Way D Type Socket
Level	TTL
Active Level	Link selectable, high or low to force reference changeover
<b>Timecode Outputs</b>	
Number of outputs	24
Connectors	BNC
Frequency	Same as input, nominally in the range 300Hz to 50KHz
Level	Same as input
Output Impedance	600 Ohms - transformer isolated
Protection	Short circuit proof
<b>Indicators &amp; controls</b>	
Switches	Manual or Automatic Mode Selection
Indicators	Mode selection and fault condition
<b>Environmental</b>	
Temperature	Instrument : -10°C + 50°C / Antenna -40°C to + 85°C
Humidity	95 % non condensing
Power	85VAC - 265VAC 50/60Hz
Power Options	18-36 VDC, 36-72 VDC, - 48VDC
<b>Physical</b>	19" Rack 1U 1.75" (H) x 7.5" (D) x 17" (W) [ 4.4 cm(H) x 19 cm (D) x 43.2 cm (W) ] Weight : 3.5 lb (1.6 Kg)
<b>Compliance</b>	CE Approved - EMC Emissions to EN55022 as EN55024 - FCC Part 15B, Class A EMC Immunity to EN50082-1 as EN61000-4-2 ESD, IEC801-3 HF Field & IEC 801-4

# Satisfied customers include..

ABB Singapore Airbus Defence & Space ASM Technologies Ltd Atkins Babcock International BAE Systems BBC BP CMC Engineering Malaysia	EDF Energy Indian Navy Jakarta Metro Leonardo Electronics Defence And Security London Stock Exchange London Underground MBDA Ltd MTRC Hong Kong National Air Traffic Services	NASA NEC Network Rail Northrop Grumman Park Air Systems Ltd Qinetiq Ltd Raytheon Systems Ltd Rockwell Automation SBS Transit Singapore Siemens Transportation	Singapore Stock Exchange Telent Technology Services Limited Teligent Thales UK Transport For London Viacom
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