

ADDENDUM  
TO  
SERIES 2073 INTERFACE CONVERTER UNIT  
  
for  
  
IOC404 PLUGGABLE INTERFACE MODULE

### A.1 OVERVIEW

The IOC404 accepts RS-530 level data and clock pairs and converts them to TTL data and clock levels. This is done as a full-duplex operation.

The IOC404 uses a DB25 connector for the RS-530 input and output signals. BNC connectors are used for the TTL input and output signals.

The IOC404 operates up to 15 Mbps. Polarities on both the RS-530 and TTL outputs can be inverted independently. Termination on the TTL inputs is jumper-selectable for 50 $\Omega$  or 75  $\Omega$ . Line-to-line termination on the RS-530 is jumper selectable for 75  $\Omega$  or 120  $\Omega$ .

The IOC404 is able to transmit the input signals on the daisy chain and global buses.

Figures A-1 and A-2 present the card panel detail of the IOC404 which show the connector labeling.

### A.2 FRONT PANEL CONTROLS AND INDICATORS

The A LED illuminates for an active RS-53 input.

The B LED illuminates for an active TTL input.





### A.3 CONFIGURING THE IOC404

Figure A-2 presents the assembly drawing of the IOC404. The following configuration jumpers are provided:

Jumper	Assignment
J1	(1-2): Terminate TTL IN A to 50Ω (2-3): Terminate TTL IN A to 75Ω
J2	(1-2): Terminate TTL IN B to 50Ω (2-3): Terminate TTL IN B to 75Ω
J3	Bridge to invert TTL IN A
J4	Bridge to invert TTL IN B
J5	Bridge to invert RS-530 IN A
J6	Bridge to invert RS-530 IN B
J7, J8, J11	Not Used
J9	(1-2): Terminate Line to Line RS-530 IN A to 120Ω (2-3): Terminate Line to Line RS-530 IN A to 75Ω
J11	Bridge to enable Global Bus B
J12	Bridge to enable Global Bus A

### A.4 DESIGN OVERVIEW

Refer to the schematics at the end of this addendum for these discussions.

The IOC410 contains two input drivers. U1 receives the RS-530 data & clock signal pairs and U4 receives the TTL data & clock. There are two output drivers. U2 outputs the RS-530 pairs and U8 outputs the TTL data and clock signals.

U5 and U6 provide signal inversion capability for the RS-530 and TTL inputs.

LED control is accomplished via U7, U9 and U10.

The Global and Daisy Chain buses are driven by U11.



## A.5 DRAWINGS

The following drawings follow:

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