# PMC DATA CONVERTER

The PMC Data Converter Module provides alternate solutions in complex Intellitec Multiplexing systems. Intellitec's PMC communications signal includes two levels for each channel, data levels "A" and "B". In addition, when using the PMC 320 Channel CPU, two communications busses are available, Blue and Yellow. The "normal" signaling between the Input and Output modules and CPU is done on level "A". These signals are received by either the Output Modules or the CPU and interpreted to result into an action.

To facilitate the indication of a channel being ON, the Latching Output Modules return a "B" level signal on to the communications bus when that channel is turned ON. This signal can be used to light the indicator on switch panels. However. the Output, Input, and PMC CPU do not recognize the "B" level signals, so any occurrence can only be used on the communications loop to which the Output Module is connected. Boolean equations can be written to allow "A" level signals to cross over from the Blue loop to the Yellow loop and vice-versa. However, "B" level signals are not recognized by the CPU and cannot cross over.

The Data Converter allows the use of data level "B" signals from latching Output Modules or data level "A" signals from the CPU or other modules to be used to signal switch panels or modules on the Blue or Yellow communications loops. In other words, the Data Converter Module allows up to ten channels of data level "A" or "B" signals to be transferred from one channel to another, on either the Blue Loop or the Yellow Loop, outputting a data level "A".

The channel assignment for the inputs and outputs is set using an Intellitec GUI via the same RS-232 Programming Adapter as the switch panels. This GUI allows the user to set the relationship between the sensed channel and the output channel. The input can be from either loop and the output can be to either loop. (See the GUI on the next page.)
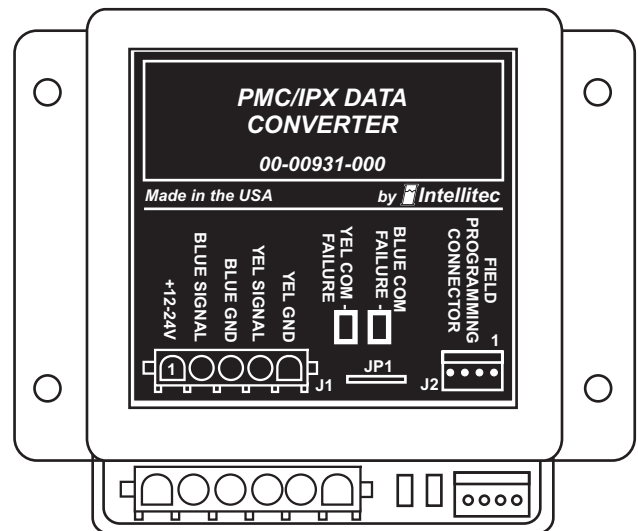
The GUI includes a number of error checking functions. It will prevent the unit from putting outputs back to inputs. It will also prevent any "closed loop" that would cause the system to lock up. When an error is detected, the GUI will inform the user of the error.

The Module can also be used to perform other functions such as using the output to turn on another Output Module together with the Latching Module. Since the Module responds to either level "A" or level "B", it can be used to cross over between any two channels in the system without going through a Boolean equation.

The Module can be connected at any point in the system. It has a total of five wires, Power, Blue Loop communications signal and Blue Loop communications ground, Yellow Loop communications signal and Yellow Loop communications ground. If a single loop is utilized, Power, Yellow Loop signal, and Yellow Loop ground should be connected.

The unit also incorporates two diagnostic LED's, "YEL COM FAILURE" and "BLUE COM FAILURE", indicating the status of the communications on the associated loops. If a communications failure occurs on either loop the corresponding "COM FAILURE" indicator will light, however, Module communications on the other loop will not be disrupted.

Intellitec
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Specifications:

Intellitec Part Number: **00-00931-000**
Nominal Vehicle Voltage = 12 or 24Vdc
Min.- Max. Operating Voltage Range = 10-32Vdc

NOTES:
General Connections:

    J1-1   +Vbat (+12/+24 Volts - Normally Supplied via CPU)
    J1-2   Blue Loop IPX Signal
    J1-3   Blue Loop IPX Ground
    J1-4   Yellow Loop IPX Signal
    J1-5   Yellow Loop IPX Ground

Typical GUI used for set up.

Up to 10 channels of inputs to outputs

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