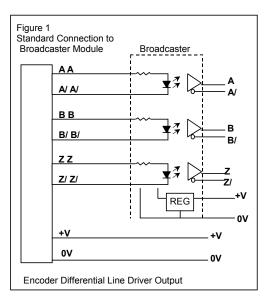
## CONNECTION INSTRUCTIONS (for Isolated Circuit and Anti-Dither Functions)

### **Differential Line Driver (See Figure 1)**

Encoder signals from 5 VDC to 24 VDC (must specify the voltage when ordering)

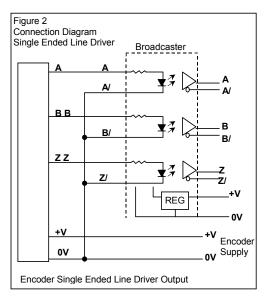
This is the preferred type of encoder output as it has the best noise immunity. Connect each encoder signal to its like input (A to A, A/ to A/, etc).



### **Single Ended Line Driver (See Figure 2)**

Encoder signal from 5 VDC to 24 VDC (must specify the voltage when ordering)

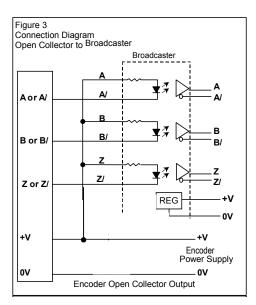
Connect broadcaster A to optical isolator module input channel A, B to B and Z to Z. Connect the A/, B/, and Z/ inputs of the optical isolator to circuit common of the encoder supply. Single ended operation is limited to shorter cable runs and is more susceptible to noise.



## Open Collector with or without Internal Pullup Resistors (See Figure 3)

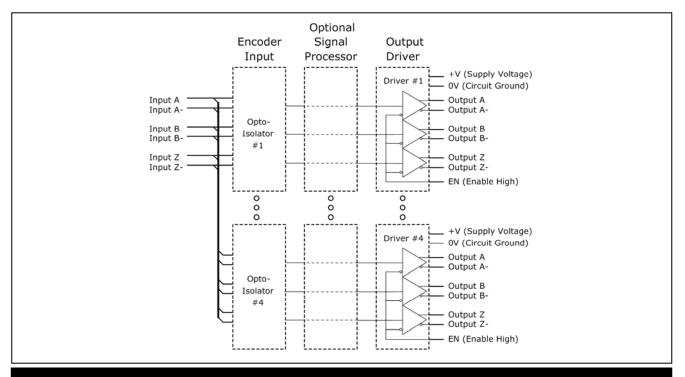
Encoder NPN (sinking) outputs.

Connect encoder output A to optical isolator module input A/, B to B/ and Z to Z/. Connect the A, B, and Z inputs of the broadcaster to the positive encoder supply line. This connection results in a logic inversion within the broadcaster module. To compensate for the logic reversal, swap A for A/, B for B/, and Z for Z/ at the broadcaster outputs.





# **BROADCASTER BLOCK DIAGRAM**



# **TERMINATION PINOUTS**

#### **ENCODER SIDE**

PIN	DESCRIPTION	NOTES
A, A/	Channel A Inputs	Input levels consistent with specified value in model number (5 V, 15 V, 24 V). Signal input current 25 mA nom. See BEI OIM Applications Guide for single ended and open collector connection diagrams
B, B/	Channel B Inputs	
Z, Z/	Channel Z Inputs	
T1, T2, T3	Uncommitted Terminals	Non-committed terminals. Provided for use as connection points for encoder power.

#### **DRIVER SIDE**

PIN	DESCRIPTION	NOTES
+ V	Power supply 5 – 28 VDC 125 mA + load current typ.	Supply lines between driver sections are not connected. Driver must be powered in order to
0 V	Power supply common	produce an output. Supply voltage need not be the same for different driver sections.
EN	Output Enable	HI = Output Active, LO = High Impedance Internal pull-up to V+
A, A/	Channel A Outputs	Output levels consistent with driver type and supply voltage (V/V outputs).
B, B/	Channel B Outputs	
Z, Z/	Channel Z Outputs	

