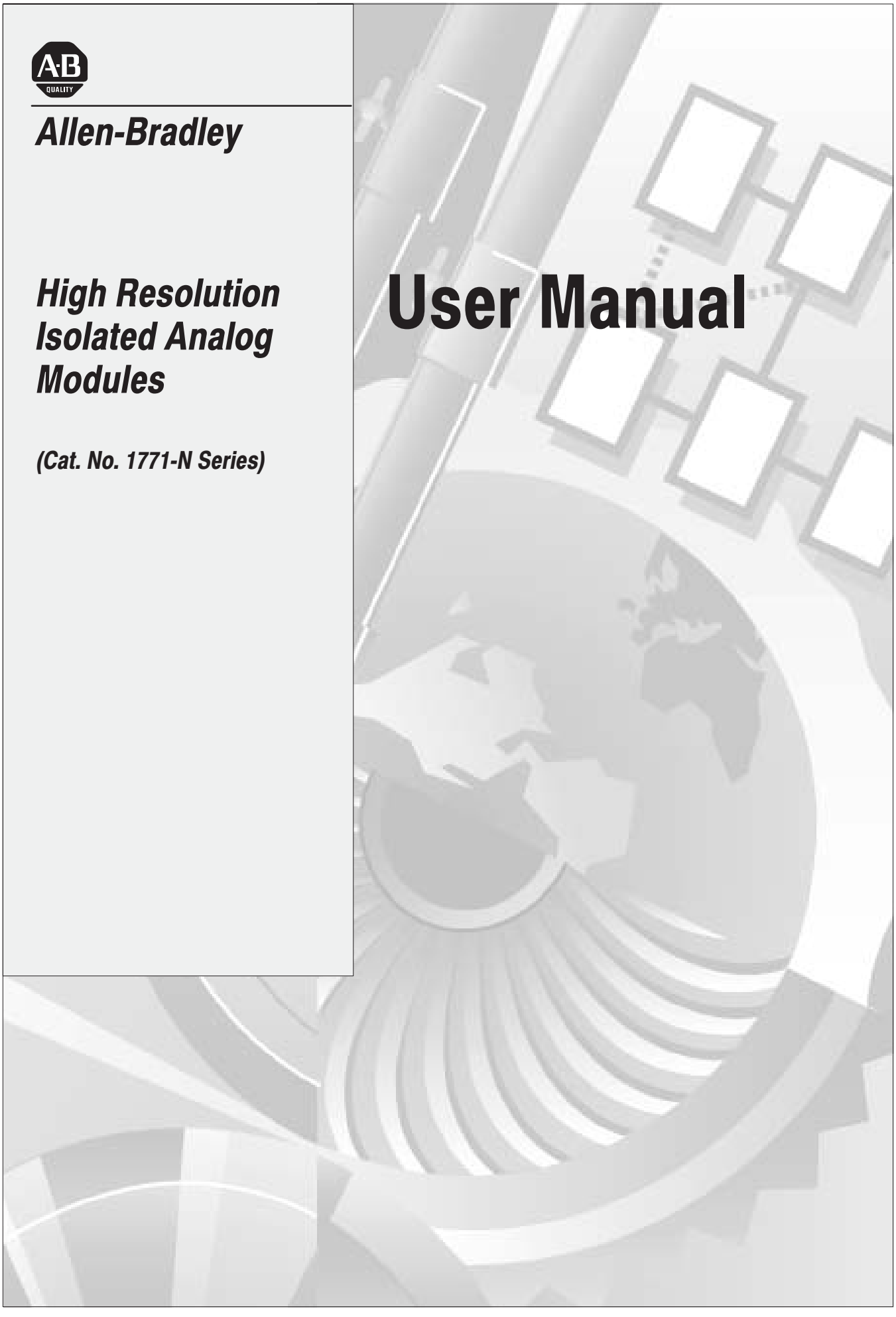


Allen-Bradley

User Manual

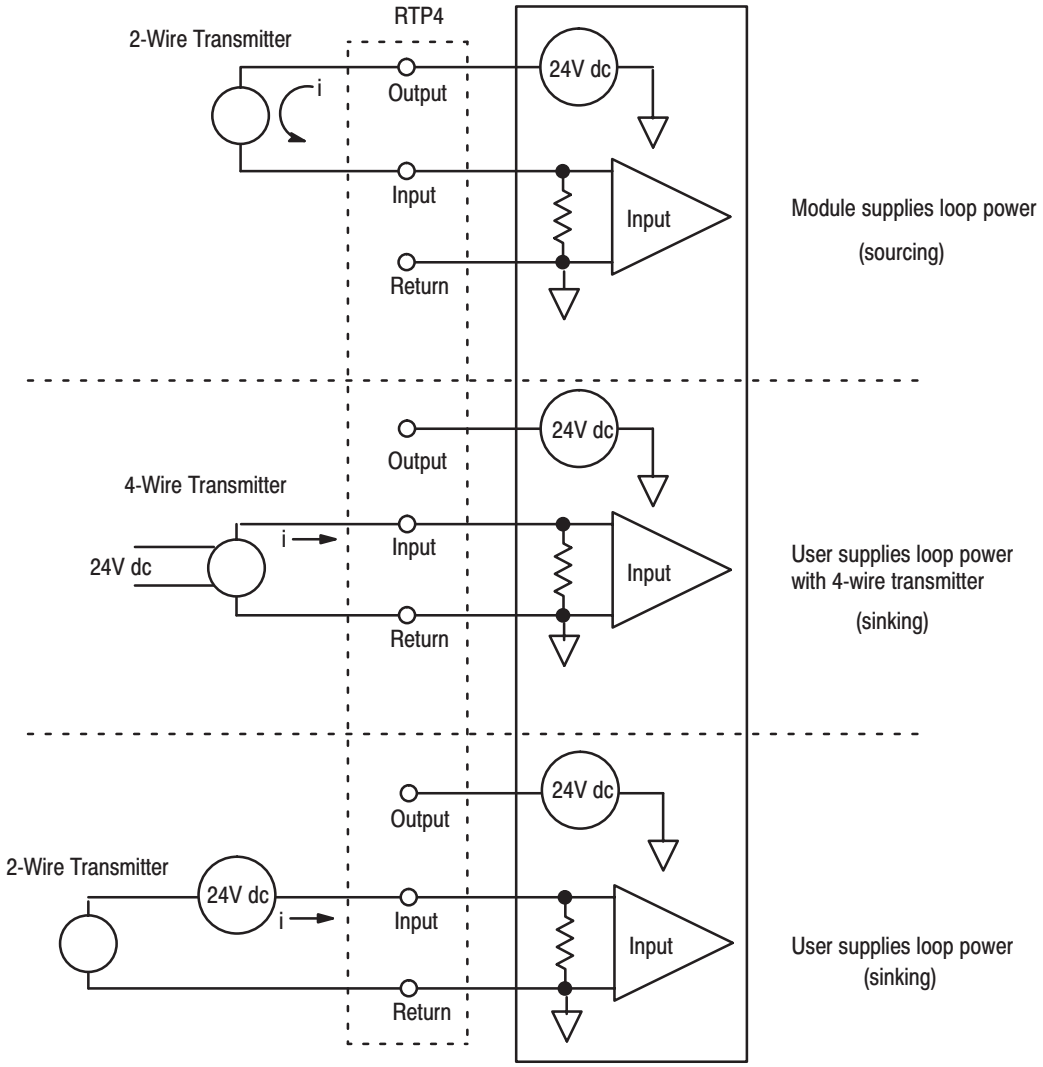
High Resolution Isolated Analog Modules

(Cat. No. 1771-N Series)

Sourcing Input Analog Modules

The 1771-NIS, 1771-NBSC and 1771-NB4S modules are sourcing/sinking input modules. These modules can supply the necessary loop power for 2-wire transmitters connected to the input. All loop power functionality is contained within the analog module. Examples of typical configurations are shown in Figure 2.6. No external resistors are required.

Figure 2.6
Examples of Sourcing/Sinking Input Modules



Inputs can be configured as sourcing or sinking inputs. For sourcing inputs, the N-series module supplies the loop power. For sinking inputs, you supply the loop power.

When the loop power is supplied externally, the 16-bit resolution provides 65535 counts over the 0–20mA current range. This provides about twice the resolution of voltage inputs with external resistors.

Making Your Own Cables

If you are not using thermocouples, you can terminate the analog module to a terminal block by cutting the 25-pin RTP end connector off the standard cable and wiring to your terminal block. Refer to Table 2.B for wire termination designations.

Table 2.B
Wire Termination Designations

Module Top Connector				Module Bottom Connector			
Channel Number	**Signal**	**37-Pin Connector**	**Wire Color**	**Channel Number**	**Signal**	**37-Pin Connector**	**Wire Color**
1	I1	20	Blk	5	I5	20	Blk
	O1	22	Blk/Wht		O5	22	Blk/Wht
	R1	21	Wht/Blk		R5	21	Wht/Blk
2	I2	24	Orn	6	I6	24	Orn
	O2	26	Orn/Blk		O6	26	Orn/Blk
	R2	25	Wht		R6	25	Wht
3	I3	29	Grn	7	I7	29	Grn
	O3	31	Grn/Blk		O7	31	Grn/Blk
	R3	30	Grn/Wht		R7	30	Grn/Wht
4	I4	33	Blu	8	I8	33	Blu
	O4	35	Blu/Blk		O8	35	Blu/Blk
	R4	34	Blu/Wht		R8	34	Blu/Wht
				Cold Junction Thermistor		36	Red
						37	Red/Wht