

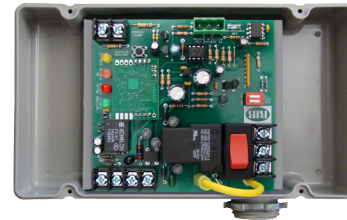
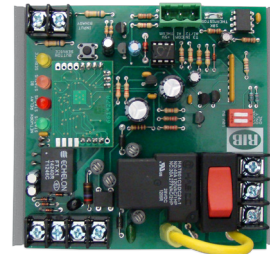
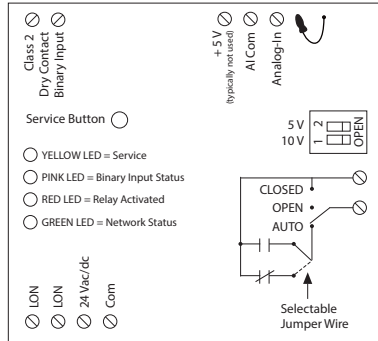
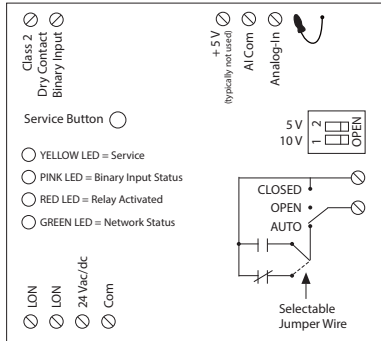
**NETWORK COMPATIBLE RELAY / CURRENT SENSOR COMBOS**

**RIBMW24SB-LNAI**

4.00" Track Mount LonWorks® Twisted-Pair FT-10 Network Three I/O Device; One Binary Output (20 Amp Relay SPST + Override), One Binary Input (Dry Contact, Class 2); One Analog Input (0-5Vdc / 0-10 Vdc); 24 Vac/dc Power Input

**RIBTW24SB-LNAI**

Enclosed LonWorks® Twisted-Pair FT-10 Network Enclosed Three I/O Device; One Binary Output (20 Amp Relay SPST + Override), One Binary Input (Dry Contact, Class 2); One Analog Input (0-5Vdc / 0-10 Vdc); 24 Vac/dc Power Input.



RELAYS

**SPECIFICATIONS**

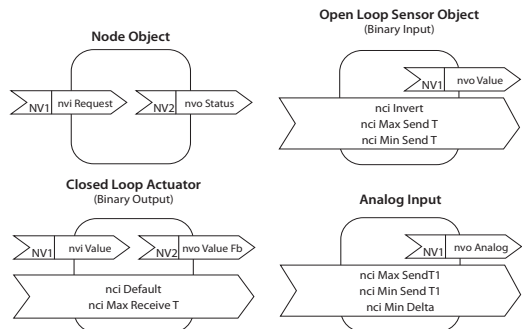
- # Relays & Contact Type:** One (1) SPST Continuous Duty Coil
- Expected Relay Life:** 10 million cycles minimum mechanical
- Operating Temperature:** -30 to 140° F
- Humidity Range:** 5 to 95% (noncondensing)
- Operate Time:** 18ms
- Green LED:** Network Status
- Red LED:** Relay Status
- Yellow LED:** Service Status
- Pink LED:** Binary Input Status
- Dimensions:** 4.00" x 4.00" x 1.50" (RIBMW24SB-LNAI)  
4.28" x 7.00" x 2.00" with .75" NPT Nipple (RIBTW24SB-LNAI)
- Track Mount:** MT4-4 Mounting Track Provided
- Approvals:** FCC, LonMark®, CE, RoHS  
UL Listed, UL916, C-UL
- Housing Rating:** UL Listed, NEMA 1, C-UL, CE Approved,  
UL Accepted for Use in Plenum,  
Also available NEMA 4 / 4X
- Gold Flash:** No
- Override Switch:** Yes
- Channel:** TP/FT-10
- Transceiver Type:** FT5000 Smart Transceiver
- Transceiver Compatibility:** FT3120 / FT3150, FTT-10 / FTT-10A, and  
LPT-10 / LPT-11 Transceivers
- Functional Blocks:** 0000 Node Object  
0004 Closed Loop Actuator Object  
0001 Open Loop Sensor Object  
0520 Analog Input
- Downloadable Files:** PDF, XIF, APB, VSS and NXE  
available on website.

- Contact Ratings:**  
20 Amp Resistive @ 277 Vac  
20 Amp Ballast @ 120/277 Vac (N/O)  
10 Amp Ballast @ 120/277 Vac (N/C)  
*Not rated for Electronic Ballast*  
10 Amp Tungsten @ 120 Vac (N/O)  
1110 VA Pilot Duty @ 277 Vac  
770 VA Pilot Duty @ 120 Vac  
2 HP @ 277 Vac  
1 HP @ 120 Vac

- Power Input Ratings:**  
111 mA @ 24 Vac  
81 mA @ 24 Vdc

- Power Input:**  
24 Vac/dc ; 50-60 Hz \*

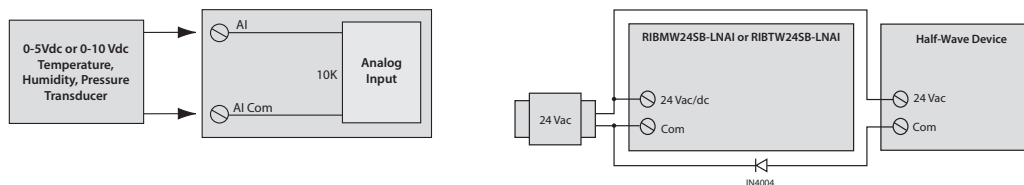
- Notes:**
  - Order with P1 option by adding "-P1" to end of model number. The P1 option is pre-programmed to allow dry contact binary input to command the relay. Contact closure on the BI will activate relay.
  - Normally Open or Normally Closed selected by yellow jumper wire.
  - Order NEMA 4 housing by adding "-N4" to end of model number. (RIBTW24SB-LNAI-N4)
  - Close DIP switch 1 for 0-5 Vdc Analog Input. Close DIP switch 2 for 0-10 Vdc Analog Input.
  - When connecting 24 Vac to both the RIB(s) and a half-wave device, damage to device can occur. Option 1: Use separate transformers for each device. Option 2: Add diode between devices, see Option 2 note below. ^^
  - See page 71 for -LNT2 or -LNT3 models if using a thermistor. If using a thermistor on the Analog Input, set DIP switches to the 0-5 Vdc setting. A look-up table must also be made.



| DESCRIPTION                         | SNVT NAME         | SNVT TYPE        |
|-------------------------------------|-------------------|------------------|
| Command to open/close relay         | nvi Value         | SNVT_switch      |
| Command status of relay             | nvo Value Fb      | SNVT_switch      |
| Default state of relay on/off       | nci Default       | SNVT_switch      |
| Communication timer                 | nci Max Receive T | SNVT_elapsed_tm  |
| Status of Binary Input              | nvo Value         | SNVT_switch      |
| Invert status of Binary Input       | nci Invert        | SNVT_lev_disc    |
| Max time between updates            | nci Max Send T    | SNVT_elapsed_tm  |
| Min time between updates            | nci Min Send T    | SNVT_elapsed_tm  |
| Value of Analog-In                  | nvo Analog        | SNVT_lev_percent |
| Max time between Analog updates     | nci Max Send T1   | SNVT_elapsed_tm  |
| Min time between Analog updates     | nci Min Send T1   | SNVT_elapsed_tm  |
| Min change in Analog before updates | nci Min Delta     | SNVT_lev_percent |

The relay will go to the default state when the communication timer times out. Setting the timer value to zero will cause the communication to never time out.

It is recommended to put a value in nci Max Send T to ensure the RIB re-synchronizes itself on the network after power loss. It is the responsibility of the user to ensure this value does not cause conflicts in network traffic. (No value = No "heartbeat" updates / no re-synchronization; Low Value = Many updates but may cause many traffic collisions; High value = Few updates but many less collisions.)



^^ Option 2: Add diode on 24 Vac power (Com) interconnection between devices. Band on diode faces towards RIB(s).