RTS™ Two Wire Intercom Series

innovating the future of communications

Model 803

Master Station

The RTS™ Model 803 Master Intercom Station is an updated replacement to the popular Model 802. By employing many of the technological breakthroughs that have occurred since the design of the 802, RTS™ has been able to integrate into the 803 the complete circuitry for all 802 base features and options except squawk. For example, call signaling is now standard on all twelve intercom channels. For applications requiring 4-wire operation, IFB panel emulation or ISO panel emulation the circuitry is already there; you simply install an option cable to the back panel, set one or two internal DIP switches (IFB and ISO emulate only) and you're ready to go. For all other applications, everything you need is "in the box".

Features

Audio Inputs and Outputs
12 intercom channels (channels 1-12); 3 auxiliary channels (channels 13-15); 2 program inputs; 2 headset dynamic-mic inputs and headphone outputs; 2 headset carbon-mic inputs and headphone outputs; 2 electret panel mic inputs; 1 built-in speaker and 1 switched speaker output; 1 unswitched, balanced mic output (hot mic).

Control Inputs and Outputs
6 DPDT relay outputs and 1 external switch contact input, all assignable via the front panel setup-mode; 12 dedicated, open-collector keying outputs (one for each intercom channel); 1 RS232/RS485 port for remote control, programming, and monitoring.

Three Operating Modes
1) normal operation, where front panel controls are used for intercommunications 2) setup mode, where front panel buttons access the user-programmable setup features; 3) DTMF mode, where the keypad is used for telephone dialing on a selected intercom channel.

Audio Input Control
Complete control of audio mix for all audio inputs via a combination of user controls, setup trimmers and the RS232/RS485 port. All audio inputs are assignable, via setup mode, to left headphone, right headphone, speaker, or any combination.

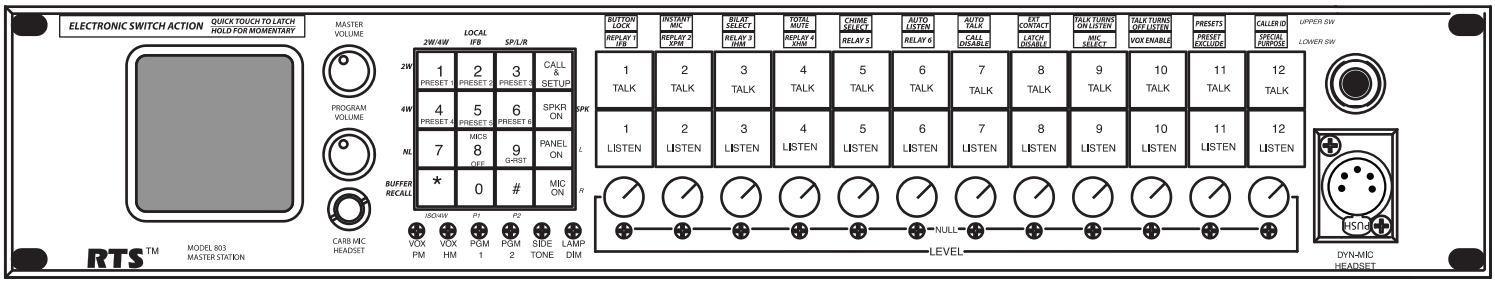
Two-Wire and Four-Wire Operation
Two-wire operation (with or without nulling) or four-wire operation independently selectable for each intercom channel via front panel setup mode; two-wire operation is standard (balanced or unbalanced); four-wire intercom channel operation requires an optional 50-pin connector); auxiliary channels 13 & 14 are four-wire only; auxiliary channel 15 is two-wire only. All channels (intercom and auxiliary) support simultaneous two-way communication (full duplex).

ISO Operation
Compatible with RTS™ VIE-306 Video ISO System; interfaces with external RTS™ VCP-6 or VCP-12 ISO Panels, or emulates these panels internally (requires one optional 50-pin connector for VCP-6 emulation; two for VCP-12 emulation).

IFB Operation
Compatible with RTS™ Model 4000 IFB System; interfaces with external RTS™ Model 4001 or 4002 IFB panels, or emulates these panels internally (requires one optional 50-pin connector for Model 4001 emulation; two for Model 4002 emulation). Also supports "local IFB", where any channel may be configured as a stand-alone IFB.

User-Programmable Setup Features
A variety of programmable features allow the user to customize, simplify, and "automate" communication tasks. (Features list includes original 802 features plus new features.) ¨ Control Signals: Call send and receive (compatible with TW intercom system), with 3 chime tones (or no chime) selectable for call send; talk-off send (compatible with RTS™ TW intercom system); global reset send DTMF send (for touch-tone dialing).

Line Drawings



803 Specifications

Inputs
- Dynamic Microphone
  - Source Impedance: 50 to 1000 ohms
  - Level: -55 dBu to -25 dBu
- Carbon Microphone
  - Level: -15 dBu nominal
  - Excitation: 10 milliamperes
- Four-Wire Receive Level
  - -20 dBu to 0 dBu into 40 kilohms
- Program Input Level
  - 0 dBu to +10 dBu into 40 kilohms

Outputs
- Headphone Level
  - 40 mW peak into 25 ohms
  - 62.5 mW peak into 100 ohms
  - 81 mW peak into 1000 ohms
- Speaker Level
  - 6 W peak power into 4 ohms
- Unswitched Balanced Mic Out (Hot mic)
  - Adjustable to +25 dBm peak
- Current Source Line Driver
  - Current: 10 mA pp nominal
  - TwoWire Level: 2 Vpp @ 200 ohms
  - Four Wire Level: 6 Vpp @ 600 ohms
- Relays
  - Bellcore surge withstand: 2.5 kV
  - Agency Approvals: UL,CSA,FCC Part 68
  - Contact Type and Ratings
  - Type: SPDT (wired DPDT in parallel)
  - Maximum resistive current: 2 A
  - Maximum operating voltage:125 VAC, 110 VDC
  - Maximum switching capacity: 62.5 VA, 60W
  - Minimum load:10 uA, 10 mVDC
  - Rated load, resistive: 0.5 A@125 VAC; 1 A@30 VDC
- Coil Ratings
  - Power Consumption:140 mW
  - Dielectric Strength: 1000 VAC
- Key Outputs
  - 0.4 A, 50 VDC maximum
- Operating Distance
  - 1 mile, nominal

Environmental
- Ambient Temperature
  - Storage: -40°C to +85°C
  - Operating: 0°C to 50°C
- Relative Humidity
  - 10% to 90% Non-condensing

Mechanical
- Color, Front Panel:Gray, Federal Standard 595A Color #26492
- Weight: 8 lb. (3.7 kg)
- Dimensions (Excluding connectors and panel mic) 3.5" (89 mm) high, 19.0" (483 mm) wide, 10.0" (254 mm) deep

Electrical Power Requirements
- Power, Nominal: 43VA
- 100/230 VAC version available
- Supplies
  - +5 VDC, 3 A
  - +15 VDC, 1.6 A
  - -15VDC, 0.3A

Ordering Information

803 • 12 Channel programmable master station • Catalog Number: 90007547000

803-C • 12 Channel programmable master station with 4-wire listen option • Catalog Number: 90007547001

803-C-G1 • 12 Channel programmable master station with 4-wire listen option and IFB-4001 emulate • Catalog Number: 90007547002

803-C-G1G5 • 12 Channel programmable master station with 4-wire listen option and IFB-4002 emulate • Catalog Number: 90007547003

803-G1 • 12 Channel programmable master station with IFB-4001 emulate • Catalog Number: 90007547009

803-G1G5 • 12 Channel programmable master station with IFB-4002 emulate • Catalog Number: 90007547010

Contact Information

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Form Number: RTS-20437
August, 2005

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