



Commercial Products & Systems

# JTA485

JTA485A / JTA485B / JTA485H

## RS485 network-gateways & protocol-translators

The RCA JTA485 family provides the ability to monitor and to control an RCA Commercial television over an RS/EIA/TIA-485 twisted-pair network, and to utilize the TV to monitor and to control other devices on the network.

These products take advantage of the Digital Serial Communications Interface (DSCI) port on RCA Commercial televisions to allow extremely cost-effective systems to be designed and installed, bringing networked control and monitoring to applications that cannot afford or justify high per-room or head-end costs. Furthermore, they allow a path of progressive migration, from simple to sophisticated systems.

- **Peer-to-peer operation:** No computers, controllers or “head-end” devices are needed for simple, out-of-the-box operation. Built-in menus allow one or more TV’s to control the power, channel, volume and local operability of other TV’s.
  - remote operation of one – or one thousand – other TV’s
  - ensures known-state for video announcements over in-house TV channel
  - simple interface for routine or emergency announcements
- **System-controlled TV’s:** Optional third-party controllers or computer software can schedule, automate, monitor and control the operation of TV’s – individually, in groups or globally – by means of printable-ASCII command-strings over RS485.
  - control & monitor power, channel, volume and local operability
  - perform “cloning” and/or set time-of-day from a centralized location
  - send on-screen text-messages for paging, advertising or information
- **TV-controlled systems:** Optional third-party controllers or computer software can utilize one or more TV’s to serve as user-interfaces for their system functionality, creating TV on-screen display (OSD) for status or menu screens and accepting TV remote-control keys to activate or to navigate those screens.
  - on-demand video systems and servers
  - security, building-automation & energy-management systems

**Applications:** schools, sports arenas, bars, restaurants, factories, houses of worship

## **Products**

### **JTA485A: Wall-Mounted RS-485-Network TV-Interface**

- Provides address-recognition & protocol-translation for TV
- Mounts onto standard junction box
  - Phoenix screw-terminals for RS485 UTP wiring
  - F-connector pass-through for RF to TV
- Connects to RCA Commercial TV via standard networking cable
  - 8-pin modular jack connects to TV DSCI port via standard 8-pin modular cable (not included)
  - powered by TV – no wall transformer needed

### **JTA485B: TV-Mounted RS-485 Network TV-Interface**

- Provides address-recognition & protocol-translation for TV
- Mounts to back of RCA Commercial TV
  - 8-pin modular pig-tail connects to TV DSCI port
  - powered by TV – no wall transformer needed
- Connects to 8-pin modular jack via standard 8-pin modular cable for RS485 UTP wiring

### **JTA485H: RS-485 Hub/Repeater**

- Converts CAT5/UTP “star” topology for use with RS-485
- Creates an isolated RS485 sub-network on each “spoke”
- Can be daisy-chained or stacked without limit
- Allows use of existing UTP infrastructure with 24 8-pin modular jacks
- Connects to PC (RS232 or RS485) via DB9F
- Rack-mountable for ease of installation in wiring-closets

## **Specifications**

### **Communications specifications**

- 9600 baud, 8N1 RS485
- CR-delimited, printable-ASCII command-lines
- logical address space of 255 groups, each of 255 individual units
- wildcard (group or global) addressing

### **Command-set**

- set or query: channel / power / local-controls-enable
- query: sync-lock (valid-video-detected)
- set: audio volume
- display on-screen text
- set time of day
- upload & download configuration (“cloning”)
- report keypresses
- report changes in state

**THOMSON**