



# ControlNet Coax Taps

Catalog Numbers 1786-TPR, 1786-TPS, 1786-TPYR, 1786-TPYS

| <b>Topic</b>                    | <b>Page</b> |
|---------------------------------|-------------|
| About This Publication          | 1           |
| About T-taps and Y-taps         | 3           |
| Parts (included)                | 4           |
| Additional Parts (not included) | 5           |
| Required Tools                  | 6           |
| Install the Coax Tap            | 6           |
| Connect the Taps                | 12          |
| Specifications                  | 14          |
| Additional Resources            | 15          |

## About This Publication

This publication contains procedures and specifications for the installation of ControlNet coaxial taps.

### Important User Information

Solid-state equipment has operational characteristics differing from those of electromechanical equipment. Safety Guidelines for the Application, Installation and Maintenance of Solid State Controls (Publication [SGI-1.1](#) available from your local Rockwell Automation sales office or online at <http://www.rockwellautomation.com/literature/>) describes some important differences between solid-state equipment and hard-wired electromechanical devices. Because of this difference, and also because of the wide variety of uses for solid-state equipment, all persons responsible for applying this equipment must satisfy themselves that each intended application of this equipment is acceptable.

In no event will Rockwell Automation, Inc. be responsible or liable for indirect or consequential damages resulting from the use or application of this equipment.

The examples and diagrams in this manual are included solely for illustrative purposes. Because of the many variables and requirements associated with any particular installation, Rockwell Automation, Inc. cannot assume responsibility or liability for actual use based on the examples and diagrams.

No patent liability is assumed by Rockwell Automation, Inc. with respect to use of information, circuits, equipment, or software described in this manual.

Reproduction of the contents of this manual, in whole or in part, without written permission of Rockwell Automation, Inc., is prohibited.

Throughout this manual, when necessary, we use notes to make you aware of safety considerations.

|                                                                                     |                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <b>WARNING:</b> Identifies information about practices or circumstances that can cause an explosion in a hazardous environment, which may lead to personal injury or death, property damage, or economic loss.                                |
|    | <b>ATTENTION:</b> Identifies information about practices or circumstances that can lead to personal injury or death, property damage, or economic loss. Attentions help you identify a hazard, avoid a hazard and recognize the consequences. |
|   | <b>SHOCK HAZARD:</b> Labels may be on or inside the equipment, for example, drive or motor, to alert people that dangerous voltage may be present.                                                                                            |
|  | <b>BURN HAZARD:</b> Labels may be on or inside the equipment, for example, drive or motor, to alert people that surfaces may reach dangerous temperatures.                                                                                    |
| <b>IMPORTANT</b>                                                                    | Identifies information that is critical for successful application and understanding of the product.                                                                                                                                          |

### Parts (included)

Before you discard the packaging of the tap kit, verify that you have all of the parts.

| Item                                                                                | Description                                               |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------|
|    | Tap, cat. no. 1786-TPR, 1786-TPS, 1786-TPYR, or 1786-TPYS |
|    | Channel A and channel B cable labels                      |
|    | Threaded screws                                           |
|    | Self-tapping screws                                       |
|    | BNC connector kits                                        |
|    | Universal mounting bracket                                |
|   | Transition plate                                          |
|  | Dust cap                                                  |

If you are missing any part, contact your Rockwell Automation Sales Representative.

## Additional Parts (not included)

Depending on the type of tap mount and installation you choose, you may require additional parts not included with this tap kit. This list describes additional parts that may be required for your tap installation.

- DIN rail, 35 x 7.5 mm (1.38 x .30 in.), EN 50022-35 x 7.5
- DIN rail, 35 x 15 mm (1.38 x .59 in.), EN 50022-35 x 15

### IMPORTANT

The ControlNet taps do not require the use of DIN rails made of specific materials. However, many of other products available from Rockwell Automation do require the use of a zinc-plated yellow-chromate steel DIN rail to assure proper grounding. The use of other DIN rail materials (such as aluminum or plastic) that can corrode, oxidize, or are poor conductors, can result in improper or intermittent grounding.

For compatibility with other Rockwell Automation products, we recommend that you use the zinc-plated yellow-chromate steel DIN rail.

- Screws of various lengths
- Tie wrap (for mounting the tap)
- 12.7 mm (0.50 in.) diameter max hook-and-loop wire strap for securing coax cable (including tap cable)



## Specifications

### Environmental Specifications - ControlNet Taps

| Attribute                                                                                                                                                                                                            | 1786-TPR, 1786-TPS,<br>1786-TPYR, 1786-TPYS |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Temperature, operating<br>IEC 60068-2-1 (Test Ad, Operating Cold),<br>IEC 60068-2-2 (Test Bd, Operating Dry Heat),<br>IEC 60068-2-14 (Test Nb, Operating Thermal Shock)                                              | -25...70 °C (-13...158 °F)                  |
| Temperature, nonoperating<br>IEC 60068-2-1 (Test Ab, Unpackaged Nonoperating Cold),<br>IEC 60068-2-2 (Test Bb, Unpackaged Nonoperating Dry Heat),<br>IEC 60068-2-14 (Test Na, Unpackaged Nonoperating Thermal Shock) | -40...85 °C (-40...185 °F)                  |
| Relative humidity<br>IEC 60068-2-30 (Test Db, Unpackaged Damp Heat)                                                                                                                                                  | 5...95% noncondensing                       |
| Shock, operating<br>IEC 60068-2-27 (Test Ea, Unpackaged Shock)                                                                                                                                                       | 30 g                                        |
| Shock, nonoperating<br>IEC 60068-2-27 (Test Ea, Unpackaged Shock)                                                                                                                                                    | 50 g                                        |
| Vibration<br>IEC 60068-2-6 (Test Fc, Operating)                                                                                                                                                                      | 2.5 g @ 10...500 Hz                         |

---

## Additional Resources

| Resource                                                                                            | Description                                                                                                                  |
|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| ControlNet Coax Media Planning and Installation Guide, publication <a href="#">CNET-IN002</a>       | Describes the required components of a ControlNet coax media system and how to plan for and install the required components. |
| NetLinx Selection Guide, publication <a href="#">NETS-SG001</a>                                     | Describes considerations for selection and planning network components, including ControlNet components.                     |
| ControlNet Modules in Logix5000 Control Systems User Manual, publication <a href="#">CNET-UM001</a> | Describes how to use ControlNet modules with Logix5000 controllers.                                                          |

You can view or download publications at <http://www.rockwellautomation.com/literature>. To order paper copies of technical documentation, contact your local Rockwell Automation distributor or sales representative.