**1T-CT-400 Series** is a comprehensive system for the transmission of RGBHV or YPbPr video at resolutions up to 1920x1200 and 1080p, plus digital or analog audio signals over Cat.5/5E or Cat.6 cable at great distances. The mix and match approach to the product line enables the user to choose the most cost efficient units to perform a specific task. Rackmount options are available for all models for ease of systems integration. All products use the unique TV One-task locking power connectors to enhance overall system security.

**Transmitters** – Three transmitter models are available, allowing the selection of the features necessary for the specific application at hand. All transmitters are capable of distances up to 300 meters (1,000 feet), some providing analog and digital audio capability. Two models handle RGBHV and one handles YPbPr format. Two models provide audio support. In addition to those transmitter models, two CORIO2 Video Scaler/Switchers have an integral UTP output. Models C2-1200 and C2-1250 can output either RGBHV or YPbPr format video signals to distances up to 300 meters (1,000 feet) without audio. Select the appropriate transmitter using the reference charts below.

**Receivers** - Five Receiver models continue the theme of flexibility, allowing the selection of the appropriate unit to provide distances of up to either 150 meter (500 feet) or 300 meter (1,000 feet). Choose models with or without audio as the application dictates. The long range models have built-in RGB Skew Compensation adjustments. The 1T-CT-456 has a built-in UTP Repeater that allows another receiver to be cascaded up to an additional 300 meters (1,000'). Select the appropriate receiver using the reference charts that follow.

### Key Features of the 1T-400 Series
- Models for RGBHV or YPbPr format
- Resolutions to 1920x1200, 1080p @ 60Hz
- Some Models with Digital and Analog Stereo
- One Model has built-in UTP Repeater for cascading
- Ranges up to 300 Meters (1,000 Feet)
- Locking power supply for security
- Optional Rackmount Kits available

### Transmitters
- 3 Models available for maximum flexibility
- 2 C2 Video Switcher/Scaler models with UTP Out
- All Models with 300 meter (1,000') maximum range
- 2 Models with RGBHV only – 1T-CT-441, 443
- 1 Model with YPbPr only – 1T-CT-453
- 2 Models with RGBHV/YPbPr – C2-1200, 1250
- 2 Models with Stereo – 1T-CT-443, 453
  (with Audio monitoring output)
- All Models with Video loop-thru for monitoring

### Receivers
- 5 Models available for maximum flexibility
- 3 Models with 500' range – 1T-CT-442, 452
- 3 Models with 1,000' range – 1T-CT-444, 456, 464
- 4 Models for RGBHV – 1T-CT-442, 444, 452, 456
- 1 Model for YPbPr – 1T-CT-464
- 3 Models with Stereo – 1T-CT-452, 456, 464
- 1 Model with built-in UTP Repeater – 1T-CT-456
- 2 Models with built-in Skew Compensation adjust
- All Models with Equalization and Gain adjustments
- 3 Models compatible with C2-1200/1250 Scalers

| FEATURE & COMPATIBILITY CHART | | Receiver Key Features | | | | |
|---|---|---|---|---|---|---|
| Choose the Receiver with the desired features, then a compatible Transmitter with the desired features to match. | | RGBHV 500' Max No Audio | RGBHV 1000' Max No Audio Skew Comp | RGBHV 500' Max Stereo | RGBHV 1000' Max Stereo Skew Comp Repeater | YPbPr 1000' Max Stereo |
| **Transmitter Key Features** | **Model** | **1T-CT-442** | **1T-CT-444** | **1T-CT-452** | **1T-CT-456** | **1T-CT-464** |
| RGBHV, No Audio | **1T-CT-441** | ● | ● | | | |
| RGBHV, Analog Stereo, S/PDIF | **1T-CT-443** | ● | ● | ● | ● | |
| YPbPr, Analog Stereo, S/PDIF | **1T-CT-453** | | | | | ● |
| RGBHV, YPbPr, No Audio | **C2-1200** | ● | ● | | | ● |
| RGBHV, YPbPr, No Audio | **C2-1250** | ● | ● | | | ● |

| Transmitter Model | Signal Type | Stereo Audio | Maximum Distance | UTP Out | Compatible 1T-CT Receivers |
|---|---|---|---|---|---|
| 1T-CT-441 | RGBHV | None | 300M (1000') | 1 | 442, 444 |
| 1T-CT-443 | RGBHV | Analog & S/PDIF | 300M (1000') | 1 | 442, 444, 452, 456 |
| 1T-CT-453 | YPbPr | Analog & S/PDIF | 300M (1000') | 1 | 464 |
| C2-1200/1250 | RGBHV/YPbPr | None | 300M (1000') | 1 | 442, 444, 464 |

**1T-CT-441**
- RGBHV In via HD-15 w/Loop-thru
- Max Res 1920x1200, 1080p
- Range to 300M, depending on Rx

**1T-CT-443**
- RGBHV In via HD-15 w/Loop-thru
- Max Res 1920x1200, 1080p
- Analog Stereo In via 3.5mm Mini with Loop-thru
- S/PDIF Audio In via Toslink
- Range to 300M, depending on Rx

**1T-CT-453**
- YPbPr In via 3 RCA
- Max Res 1920x1200, 1080p
- Analog Stereo In via 3.5mm Mini with Loop-thru
- S/PDIF Audio In via Toslink
- Range to 300M, depending on Rx

| Receiver Model | Signal Type | Stereo Audio | Maximum Distance | Built-in RGB Skew Comp | Compatible 1T-CT Transmitters |
|---|---|---|---|---|---|
| 1T-CT-442 | RGBHV | None | 150M (500') | No | 441,443, 465, 567 |
| 1T-CT-444 | RGBHV | None | 300M (1000') | Yes | 441,443, 465, 567 |
| 1T-CT-452 | RGBHV | Analog & S/PDIF | 150M (500') | No | 443, 465, 567 |
| 1T-CT-456 (1) | RGBHV | Analog & S/PDIF | 300M (1000') | Yes | 443, 465, 567 |
| 1T-CT-464 | YPbPr | Analog & S/PDIF | 300M (1000') | No | 453, 465, 567 |

Note: (1) This model has a built-in Cat.5 Repeater to drive another Receiver at up to 1000'.

**1T-CT-442**
- RGBHV Output via HD-15
- Max Res 1920x1200, 1080p
- Range up to 150M (500')
- Equalization and Gain Adjust

**1T-CT-444**
- RGBHV Output via HD-15
- Max Res 1920x1200, 1080p
- Range up to 300M (1,000')
- Equalization and Gain Adjust
- Built-in RBG Skew Comp

**1T-CT-452**
- RGBHV Output via HD-15
- Max Res 1920x1200, 1080p
- Analog Stereo Out via 3.5mm Mini
- S/PDIF Audio Output via Toslink
- Range up to 150M (500')
- Equalization and Gain Adjust

**1T-CT-456**
- RGBHV Output via HD-15
- Max Res 1920x1200, 1080p
- Analog Stereo Out via 3.5mm Mini
- S/PDIF Audio Out via Toslink
- Range up to 300M (1,000')
- Equalization and Gain Adjust
- Built-in RBG Skew Comp
- Built-in UTP Repeater Output

**1T-CT-464**
- YPbPr Output via 3 RCA
- Max Res 1920x1200, 1080p
- Analog Stereo Out via 3.5mm Mini
- S/PDIF Audio Out via Toslink
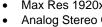- Range up to 150M (500')
- Equalization and Gain Adjust

## Specifications – Transmitters

**Video Inputs**

| | |
|---|---|
| 1T-CT-441, 443 | 1x RGBHV via HD-15 |
| 1T-CT-453 | 1x YPbPr via 3 RCA |

**Video Loop-thru Outputs**

| | |
|---|---|
| 1T-CT-441, 443 | 1x RGBHV via HD-15 |

**Audio Inputs**

| | |
|---|---|
| 1T-CT-441 | None |
| 1T-CT-443, 453 | 1x Analog Stereo via 3.5mm<br>1x S/PDIF via Toslink |

**Audio Monitoring Outputs**

| | |
|---|---|
| 1T-CT-441 | None |
| 1T-CT-443, 453 | 1x Analog Stereo via 3.5mm |

**Video Performance**

| | |
|---|---|
| Maximum Resolutions | Up to 1920x1200, 1080p / 60Hz |
| Video Bandwidth | 350MHz |
| Input Signal Levels | Video 0.75mV, Sync 5V TTL |
| Horizontal Freq Range | 15-70KHz |
| Vertical Freq Range | 30-170Hz |

**Audio Performance**

| | |
|---|---|
| Input Sampling Rates | 32, 44.1, 48, 96KHz |

**Maximum Range**

| | |
|---|---|
| All Models | 300m (1000'), depending on Receiver selected |

**UTP Output Connectors**

| | |
|---|---|
| 1T-CT-441, 443, 452 | 1xRJ-45 |

**Mechanical (H-W-D)**

| | |
|---|---|
| 1T-CT-441, 443, 453 | 88x141x32mm (1.26x5.5x3.5") |

**Weight**

| | |
|---|---|
| 1T-CT-441, 443, 453 | 224g (0.53 lbs) |

**Power Requirement**

| | |
|---|---|
| External Power Supply | 5 VDC@2A, Locking DC |

**Accessories Included**

| | |
|---|---|
| 1x Power Adapter | US, UK or Euro |
| 1x User Manual | 1T-CT-400 Series |

**Optional Accessories**

| | |
|---|---|
| RM-370T Rackmount | 3 units – 1T-CT-441, 443, 453 |

**Model Numbers**

| | |
|---|---|
| 1T-CT-441 | For RGBHV |
| 1T-CT-443 | For RGBHV, Stereo |
| 1T-CT-453 | For YPbPr, Stereo |

**Note**

Video Switcher/Scaler Models C2-1200 and C2-1250 have UTP outputs that can transmit either RGBHV or YPbPr to distances up to 300 meters without audio. Check the Spec Sheets for those products for full details. These units are compatible with UTP Receiver models 1T-CT-442, 444, 464.

## Specifications - Receivers

**UTP Inputs**

| | |
|---|---|
| 1T-CT-442, 444, 452 | 1xRJ-45 |
| 1T-CT-456, 464 | 1xRJ-45 |

**UTP Outputs**

| | |
|---|---|
| 1T-CT-456 | 1xRJ-45 for UTP Repeater Out |

**Video Outputs**

| | |
|---|---|
| 1T-CT-442, 444, 452, 456 | 1x RGBHV via HD-15 |
| 1T-CT-464 | 1x YPbPr via 3 RCA |

**Audio Outputs**

| | |
|---|---|
| 1T-CT-442, 444 | None |
| 1T-CT-452, 456, 464 | 1x Analog Stereo via 3.5mm<br>1x S/PDIF via Toslink |

**Video Performance**

| | |
|---|---|
| Maximum Resolutions | Up to 1920x1200, 1080p / 60Hz |
| Video Bandwidth | 350MHz |
| Output Signal Levels | Video 0.75mV, Sync 5V TTL |
| Horizontal Freq Range | 15-70KHz |
| Vertical Freq Range | 30-170Hz |

**Audio Performance**

| | |
|---|---|
| Output Sampling Rate | 32KHz |

**Maximum Range**

| | |
|---|---|
| 1T-CT-442, 452 | 150m (500'), RGBHV Out |
| 1T-CT-444, 456 | 300m (1000'), RGBHV Out |
| 1T-CT-464 | 300m (1000'), YPbPr Out |

**Adjustments**

| | |
|---|---|
| All Models | Equalization and Gain |
| 1T-CT-444, 456 | RGB Skew Compensation |

**Mechanical (H-W-D)**

| | |
|---|---|
| All models | 89x141x32mm (1.26x5.5x3.5") |

**Weight**

| | |
|---|---|
| All Models | 240g (0.53 lbs) |

**Power Requirement**

| | |
|---|---|
| External Power Supply | +5 VDC@2A, Locking DC |

**Accessories Included**

| | |
|---|---|
| 1x Power Adapter | US, UK or Euro |
| 1x User Manual | 1T-CT-400 Series |

**Optional Accessories**

| | |
|---|---|
| RM-370T Rackmount | 3 units – All Models |

**Model Numbers**

| | |
|---|---|
| 1T-CT-442 | For RGBHV to 150m |
| 1T-CT-444 | For RGBHV to 300M |
| 1T-CT-452 | For RGBHV to 150m w/Stereo |
| 1T-CT-456 | For RGBHV to 300m w/Stereo |
| 1T-CT-464 | For YPbPr to 150m w/Stereo |

## Specifications – Common to all 1T-CT-400 Series Models

**Environmental**

| | |
|---|---|
| Operating Temperature | 0° to +70° C (+32° to +158° F) |
| Operating Humidity | 10% to 90%, Non-condensing |
| Storage Temperature | -40° to +70° C (-40° to +158° F) |
| Storage Humidity | 10% to 90%, Non-condensing |

**Warranty**

| | |
|---|---|
| Limited Warranty | 3 Years Parts and Labor |

**Regulatory Approvals**

| | |
|---|---|
| Encoder/Decoder Unit | FCC, CE, RoHS |
| Power Supply | UL, CUL, CE, PSE, GS, RoHS |

**Cable Requirements**

| | |
|---|---|
| CAT.5/5E or CAT 6 | Network Grade, Premium |

**tvone**

**Panel Drawings**

## Transmitters

| | | |
|---|---|---|
| **1T-CT-441** VIDEO TRANSMITTER Long Range | **1T-CT-443** VIDEO TRANSMITTER with Digital Audio Long Range | **1T-CT-453** COMPONENT VIDEO TRANSMITTER with Digital Audio Long Range |

## Receivers

| | | |
|---|---|---|
| **1T-CT-442** VIDEO RECEIVER | **1T-CT-444** VIDEO RECEIVER Long Range | **1T-CT-452** VIDEO RECEIVER with Digital Audio |

| | |
|---|---|
| **1T-CT-456** VIDEO RECEIVER/REPEATER with Digital Audio Long Range | **1T-CT-464** COMPONENT VIDEO RECEIVER with Digital Audio |