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## 1.2 GHz Indoor Tx & Rx Series

see models covered on Page 3

# OWNER'S MANUAL

# TABLE OF CONTENTS

**TABLE OF CONTENTS..... 2**

**SAFETY NOTICES..... 2**

**PARTS LIST ..... 3**

**PRE INSTALLATION ..... 4**

*Site Evaluation ..... 4*

*Channel Selection..... 4*

*Conducting a Bench Test & Setup..... 5*

**WARRANTY INFORMATION/ TERMS & CONDITIONS ..... 6**

# SAFETY NOTICES

**I. THIS DEVICE DOES NOT COMPLY WITH FCC / IC RULES**

and is intended for re-sale to law enforcement, government agencies and export only.

**OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITONS:**

- (1) Using this device with an FCC approved transmitter device will render that device “NoN-compliant” and may be subject to any laws or regulations governing the use of said device.
- (2) Purchaser assumes all liability or damage resulting from the use, misuse or unlawful use of the product – and - the product will be used in a legal and lawful manner in accordance with all applicable federal, state and local laws.

II. In order to comply with the FCC/IC adopted RF exposure requirements, this transmission system will be installed by an authorized installer. Installation of all antennas must be performed in a manner that will provide at least 23cm clearance from the front radiating aperture, to any user or member of the public.

III. This is NOT an intrinsically safe device. Do not take into area where intrinsic safety is required. Bodily harm may result if warning is ignored.

IV. **DO NOT OPERATE TRANSMITTER WITHOUT ANTENNA CONNECTED TO ANTENNA PORT.** Failure to do so will result in permanent damage to the unit and void the warranty.

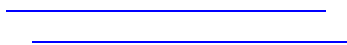
V. **DO NOT OPERATE THE SYSTEM WHEN the Transmitter & Receiver are closer than ten feet to each other.** The devices may not work properly and permanent damage can occur.

VI. The device has **NOT** been certified by the FCC for use with other products without any further certification (as per FCC section 2.1091.) Changes or modifications not expressly approved by VideoComm Technologies could void the user’s authority to operate the equipment.

## PARTS LIST

The 1.2GHz Indoor wireless 4 Channel series has been carefully manufactured, tested, inspected and packaged. Please inspect the packaging carefully to ensure you have received all the necessary parts and accessories listed. Refer to the following chart to determine which parts are included with your product. If any parts are missing or damaged, contact **VideoComm Technologies**, Customer Service or your re-seller immediately.

Parts Included	# TC-1245	# TC-1291sp	# TC-1293sp	# TX-1245	# TX-1291sp	# TX-1293sp	# RX-1245
<b>1.2GHz Video Transmitter</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	-
Transmitter RF Power	<b>50mW</b>	<b>1 Watt</b>	<b>3 Watt</b>	<b>50mW</b>	<b>1 Watt</b>	<b>3 Watt</b>	-
1.2GHz Tx Antenna	<b>SMA-Male</b>	<b>SMA-Male</b>	<b>SMA-Male</b>	<b>SMA-Male</b>	<b>SMA-Male</b>	<b>SMA-Male</b>	-
12VDC Power Supply	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	-
<b>1.2GHz Video Receiver</b>	<b>X</b>	<b>X</b>	<b>X</b>	-	-	-	<b>X</b>
1.2GHz Rx Antenna	<b>F-Male</b>	<b>F-Male</b>	<b>F-Male</b>	-	-	-	<b>F-Male</b>
12VDC 500mA Power Supply	<b>X</b>	<b>X</b>	<b>X</b>	-	-	-	<b>X</b>



# PRE INSTALLATION

## Site Evaluation

### Ground Plane

If the radio devices are not mounted high enough above obstructions, the signal strength will be seriously reduced; therefore your distance will be reduced. The signal will literally bounce up and away from your intended target. This is known as a negative ground plane effect. The ground plane could not only be the ground you stand on, but could also be the rooftops of cars or distant buildings. This is particularly important if we have a metal roof that tends to deflect signals away from the target. Also consider any obstruction that may get in the way, like another roof or a tractor-trailer that may pass through your “line of sight”

### Things that block transmission

Things that block transmission are not always obvious. Here are some of the most common pitfalls:

- Water, or anything with water in it (people are 98% water). Snow & rain can reduce your distance.
- Steel, or anything with steel in it---steel-reinforced concrete (rebar) or metal window screens, or a tool-room cage. Aluminum siding, and energy-saving foil on the insulation in the walls are sneaky killers for radio waves. Some metallic paints or metallic wallpapers also block signals.
- Mirrors block transmission, because the “mirror” consists of a metallic backing on the glass.
- Lead windows will kill radio transmission; also windows that are UV coated may have thin metal energy-saving film.
- High Voltage transmission lines (physically they look small, but for video transmission purposes, they might as well be 6-foot diameter metal sewer pipes.
- Other materials like brick, drywall or wood, will also cut down on the signal, depending on water content.

## Channel Selection

**WARNING** – DO NOT OPERATE TRANSMITTER WITHOUT ANTENNA CONNECTED TO ANTENNA PORT. Failure to do so will result in permanent damage to the unit and will void the warranty.

Since the transmitter and receiver operate alike, the same instructions apply for both devices when changing channels. For the wireless link to work, both devices must have the same channel selected.

1. Attach the included rubber duck antennas to transmitter and receiver
2. Power-UP the Transmitter/Receiver using the included power supply
3. Slide the channel select button left or right to cycle through to the desired channels.
4. Repeat these steps for the receiver. The receiver must have the same and matching channel to receive the video signal

### **Conducting a Bench Test & Setup**

With so many technical variables in an installation, the strongest recommendation we can make is to conduct a bench test. After verifying that all components of the system are in good working order and connected properly, we can arrive on the job site confident that all of our devices will install with the least amount of on-site effort. Should problems arise on-site, we can easily trouble shoot the system by starting with wiring and connector terminations, knowing that a bench test has already proved the components are up and running.

**\*\* DO NOT OPERATE TRANSMITTER WITHOUT ANTENNA CONNECTED \*\***  
**\*\* Permanent Damage to the Transmitter will occur \*\***

#### ***Basic Bench Test Procedure***

##### ***1. Physical Inspection of Product***

- Compare the unit to the product photo on the attached specification sheet.
- Check for physical damage to the devices, contact your distributor or VideoComm Technologies Technical Support immediately should you suspect damage to the unit.
- Ensure all parts are included. ***See Page 3***

##### ***2. Bench Testing Your 1.2GHz transmitter***

- Ensure there are no live wires on the test bench that may cause an electrical short.
- Ensure the camera and monitor used in the bench test and on site are in good working order by conducting a hardwired video test.
- Use a multi-meter to ensure the power supplies have the proper voltage output.
- Connect a camera source to the video input on the transmitter.
- *Connect the receiver video output to your monitor*
- Connect power supply leads to the transmitter & receiver.
- Use a separate power supply for each device. Do not share power supplies.
- Confirm the set up for receiver is complete. Power is “ON”, confirm the antenna is attached correctly.
- ***If the transmitter or receiver becomes hot to the touch, immediately unplug your power source and contact VideoComm Technologies Technical Support.***
- ***Ensure both devices are set to the same channel of operation.***
- Do not encapsulate the antenna in any kind of metal enclosure. Plastic, wood or other similar materials are satisfactory.

## WARRANTY INFORMATION/ TERMS & CONDITIONS

VideoComm Technologies, herein referred to as "VCT."

### LIMITED WARRANTY

VCT hereby warrants, subject to the conditions here in below, that should this product become defective by reason of improper workmanship or material defect during the specified warranty period, VCT will repair the same, effecting all necessary parts without charge for either parts or labor, or replace the unit at VCT option.

Labor: ONE (1) Year from the date of original purchase from authorized Re-seller. TWO (2) Years for Antennas only.

Parts: ONE (1) Year from the date of original purchase from authorized Re-seller. TWO (2) Years for Antennas only.

### Void Warranty

Purchaser warranty will be void and purchaser waves any rights to make warranty claim if product has been opened, altered or modified, repaired or serviced by anyone, other than the service facilities authorized by VCT to render such services. Further, the seal/serial number on the unit must not have been altered or removed. The unit must not have been subject to accident, misuse, abuse or operated contrary to the instructions provided. The opinion of VCT with respect to this matter shall be final. This warranty does not include and is not extended to broken and damaged accessories, batteries and exposed antennas and to parts wearing out due to normal wear and tear.

### Proper Delivery:

Returned products will not be accepted for warranty repair unless accompanied with a valid Return Merchandise Authorization (RMA) number issued by VCT. RMA numbers issued by VCT are valid for 15 days. Shipments received after 15 days will be refused. The unit must be shipped, freight prepaid or delivered to the VCT Service facility, in either its original package or similar package, affording an equal degree of protection and with instructions indicating the location within Canada or the United States to which the unit will be returned. The repaired unit will be returned to the customer freight prepaid unless the warranty claim is deemed void or invalid. All accessories included with the unit must be listed individually on the packing slip for the shipping documentation. VCT will not accept any liability, for loss or damage to such accessories if they are not listed.

### Proof of Purchase Date:

This warranty applies and commences to VCT products, from the original date of purchase from an Authorized Re-seller. Proof of purchase (i.e.: photocopy of invoice), must be included with product when submitting for warranty repair.

### Warranty Limitations:

This warranty does not cover maintenance or check-ups, if required. This warranty gives you specific legal rights and you may also have other rights, which vary from state/province to state/province. Some states/provinces do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, therefore the above exclusions or limitations may not apply to you. VCT is not responsible or liable for indirect, special, incidental or consequential damages arising out of or in connection with, the use or performance of the product or other damages with respect to loss of property, loss of revenues or profit, or cost of removal, installation or reinstallation.

### PRODUCT RETURNS

**30 Day Product Return Policy** \*\* If you are not satisfied with a product, you may return it to VCT within 30 days from original date of shipment within the following conditions:

- ◆ Original shipping charges are not refundable unless deemed that VCT shipped incorrect item(s), incorrect quantity (ies) or original manufacturers defective product ( subject to VCT validation ).
- ◆ Returned products will not be accepted unless accompanied with a valid Return Merchandise Authorization number (RMA).
- ◆ RMA numbers issued by VCT are valid for 15 days. Shipments received after 15 days will be refused.
- ◆ Returns must include a copy of original invoice, the completed VCT packing slip, and a detailed statement of reason for return.
- ◆ Customer is responsible for all freight charges, duties and taxes, if applicable. Product must be properly packaged and shipped, prepaid to VCT in its original packaging, or similar packaging that offers an equal degree of protection. VCT will charge the full replacement cost for any missing components or parts. VCT is not responsible for lost or damaged merchandise. We strongly recommend insuring products for return shipping.
- ◆ Return claims are void if manufacturer's seal is broken and/or products are altered or modified, subjected to an accident, improper handling, improper installation, misuse and abuse or operated contrary to the operating instructions. Products returned that are not in "re-saleable" condition will be returned to customer at their expense.
- ◆ Discontinued items, special or custom-made equipment items (items not carried as stock even though they may appear on price lists) may not be returned. Returned products will be evaluated at the original purchase price and not at any subsequent price increase or decrease.

\*\* Subject to the conditions stated above, the following re-stocking fees will apply to products returned for credit/refund.

VCT reserves the right to determine the validity of the product returned and / or refuse to accept product for credit.

**0 % Re-Stocking Fee** (less original shipping charges): If product is returned within 30 days from original VCT ship date.

**25% Re-Stocking Fee** (less original shipping charges): If product is returned within 60 days from original VCT ship date.

**50% Re-Stocking Fee** (less original shipping charges): If product is returned within 90 days from original VCT ship date.

**100% Re-Stocking Fee ( 0% credit ) : If product is returned after 90 days from original VCT ship date.**

### DISCLAIMER

In no event will VCT or any of its affiliates be liable for any indirect, special, punitive, consequential liability, or incidental damages upon any basis of liability whatsoever even if advised of the possibility of such damages. In addition, VCT does not take any responsibility or assume any liability for the wiring, installation or placement of the equipment Customer purchases, or for the activities of any other individual or entity such as Customer's Company, those who prepare the specifications or any local Authorities who inspect or approve Customer's installation.