

**TOSHIBA**

# TRX-120

Integrated Receiver Descrambler



**NEW**

## Encounter The Difference

Introducing the TRX-120 — Toshiba's new home satellite receiver. The technologically advanced TRX-120 has full C/Ku compatibility, stereo sound, VideoCipher® descrambler module, automatic antenna controller and actuator power drive built-in.

Sophisticated electronics are easy to enjoy with user-friendly software, on-screen graphics, full-function remote control with UHF option, and the new amber "Image Magic" LCD display. The TRX-120's proven dependability and high performance are backed with Toshiba's 2-year limited warranty.

TRX-120 — the reliable, affordable IRD for unequalled home satellite television.

- C/Ku band full compatibility with 30 channel, 30 Ku band satellite data memory.
- VideoCipher® descrambler module included.
- Integrated antenna controller and actuator power drive with automatic micro-tuning for antenna position and polarity.
- Digital stereo in VC mode plus matrix and discrete stereo.
- Full function infrared remote control with optional UHF adapter.
- "Image Magic" amber LCD display panel shows system in operation.
- Programmable features for customized performance.
- On screen graphic display menus for ease of use.
- 30 programmable favorite channels grouped by program name in six categories.
- Parental control with user-chosen password.
- Direct access selection for satellite, channel and audio choices.
- Digitally controlled tuning for accurate reception.
- 2-year limited warranty, U.L. listed.

# TRX-120

Integrated Receiver Descrambler

## Specifications

### RF

Input Frequency: 950 to 1450 MHz  
Input Impedance: 75 ohms  
Noise Figure: 12 dB  
Image Rejection Ratio: 45 dB  
Input Signal Level: -60 to -20 dBm  
Second IF: 140 MHz  
Threshold Level: 7 dB C/N  
Bandwidth: 27 MHz

### Video Performance

Output Impedance: 75 ohms  
Frequency Response: +1/-3 dB  
(10 kHz to 4.2 MHz)  
Output Level: 1Vp-p ± 2 dB

### Audio Performance

Bandwidth: 330/150 kHz selectable  
De-emphasis: 75 μsec  
Subcarrier Frequency: 5.0 to 8.5 MHz variable  
Frequency Response: ±1dB  
(30 to 15 kHz)  
Output Impedance: 600 ohms unbalanced  
Output Level: 140 mV rms  
Signal to Noise Ratio: 60 dB

### RF Modulator

Output Frequency: VHF US Ch3 or Ch4 selectable  
Output Level: 66 dBμV ± 3 dB

### Power

Primary Power: 120 VAC, 60 Hz  
Power Consumption: 185 watts  
Power Supply to LNB: 16.5 to 21.2 V DC  
180 mA max. x 2  
Polarizer Output: 5 ± 0.5 V, 1.0 A max.

### Actuator Interface

Motor Power (M1, M2): 36 V Nominal  
2.5 A max.  
Class 2  
5 V Supply: Min. 5.5 V, Max. 6.0 V  
Sensor (Reed Switch): Form C closure  
(Hall): +5 V TTL Level

### Environmental Condition

Operating Temperature: 32 to 104°F  
(0 to 40°C)  
Humidity: Indoor Environment

### Mechanical

Dimensions: (W x H x D)  
17" x 3 1/2" x 13 3/4"  
Weight: 20 pounds

## Features Checklist

- Amber LCD "Image Magic" Display
- Built-in VideoCipher® Descrambler
- Built-in Automatic Antenna Controller
- Built-in Actuator Power Drive Circuit
- Infrared Full Function Remote Control
- *Optional* UHF Remote Adapter
- Full Stereo: Digital in VC mode, Matrix and Discrete
- User-Customized Features
- On-Screen Graphic Display Menus
- Parental Control by Satellite and Channel
- 30 Favorite Channels
- C/Ku Band Satellite Memory Map
- 30 C Band Satellites in Memory
- 30 Ku Band Satellites in Memory
- 24 C Band Channels in Memory
- 32 Ku Channels in Memory
- Frequency Synthesized Tuning
- Automatic Micro-Tuning
- Channel Skip Selection
- Two RF Inputs (C/Ku or H/V)
- T.I. Loop Terminal
- Base Band Output Terminal
- UL Listed, FCC and CSA Approved

### Rear Panel



- 1 Two (2) RF Inputs (C/Ku or H/V)  
Type F female
- 2 IF Loop-Through Connectors  
(IN, OUT, 140 MHz)  
Type F females
- 3 Base Band Output  
RCA phono jack
- 4 Video Output (to VCR/Monitor)  
RCA phono jack
- 5 Audio Outputs  
(to VCR/Amplifier)  
RCA phono jacks
- 6 IPPV Output  
RCA phono jack
- 7 Data Output  
RCA phono jack
- 8 Remote Sensor Jack  
Mini jack
- 9 Polarizer Output  
5P push-lock terminal  
(+5 V, PULSE, GND, H, V)
- 10 Actuator Interface  
6P screw terminal  
(GND, PULSE, +5 V, SH, M1, M2)
- 11 VHF Input (from TV antenna)  
Type F female
- 12 VHF Output (to TV)  
Type F female
- 13 AC Outlet—Unswitched

Design and specifications are subject to change without notice.

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# TOSHIBA

## TOSHIBA AMERICA CONSUMER PRODUCTS, INC.

Video Communications Group  
1010 Johnson Drive  
Buffalo Grove, Illinois 60089-6900  
(312) 541-9400

## TOSHIBA OF CANADA LIMITED

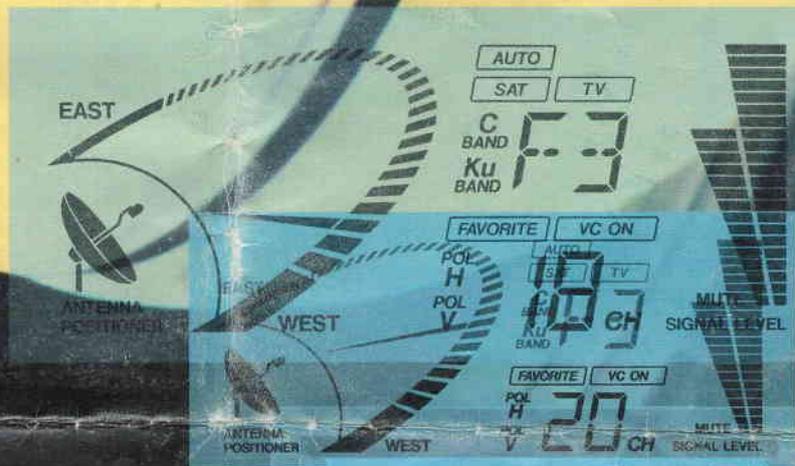
3680 Victoria Park Avenue  
Willowdale, Ontario M2H 3K1  
(416) 499-5555

# TRX-80/TRX-100

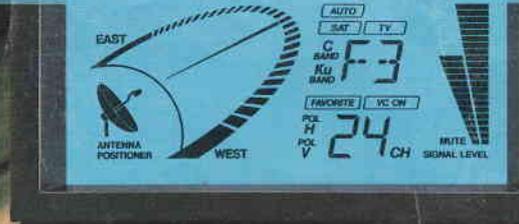
Integrated Receiver Descramblers

**NEW**

**Encounter The Difference**



**TOSHIBA**



**VIDEO CIPHER II**  
SATELLITE RECEIVER MODEL TRX-80



**TOSHIBA**

## TRX-80/TRX-100 Specifications

### RF

Input Frequency: 950 to 1450 MHz

Input Impedance: 75 ohms

2nd IF: 140 MHz

### VIDEO PERFORMANCE

Output Impedance: 75 ohms

Output Level: 1 Vp-p  $\pm$ 2 dB

### AUDIO PERFORMANCE

Bandwidth: 330/150 kHz selectable

Subcarrier Frequency: 5.0 to 8.5 MHz variable

Output Impedance: 600 ohms unbalanced

### RF MODULATOR

Output Frequency: VHF US Ch3 or Ch4 selectable

### POWER

Primary Power: 120 V AC, 60 Hz

Power Consumption: 185 watts

Power Supply to LNB: 16.5 to 21.2 V DC  
180 mA max. x 2

### ACTUATOR INTERFACE

Motor Power (M1, M2): 36 V Nominal, 2.5 A max.  
Class 2

### MECHANICAL

Dimensions (W x H x D): 17" x 3-1/2" x 13-3/4"

Weight: 20 lbs.

FEATURE COMPARISON		TRX-100	TRX-80
Built-in VideoCipher® II Descrambler		✓	✓
Built-in Automatic Antenna Controller and Actuator Power Drive Circuit		✓	✓
Infrared Full Function Remote Control		✓	✓
Frequency Synthesized Tuning		✓	✓
Stereo (Digital in VC Mode, Matrix, Discrete)		✓	✓
On-Screen Display		✓	✓
C/Ku-Band Compatible		✓	✓
RF Input		2 Inputs	1 Input
Satellite Memory Capacity	C-Band	30	22
	Ku-Band	30	22
Channel Memory Capacity	C-Band	24	24
	Ku-Band	32	32
Parental Control		by Satellite, by Channel	by Channel
20 Favorite Channel Programming		✓	✓
Automatic Micro-Tuning		✓	✓
Channel Skip		✓	
User Customized Features		✓	
Satellite Memory Map		C/Ku Band	C Band
UHF Remote Adaptor		Optional	Optional
T.I. Loop Terminal		✓	Optional
Base Band Output Terminal		✓	✓
Front Display Panel		LCD	FL & LED
Beep Sound		✓	

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1010 JOHNSON DRIVE  
BUFFALO GROVE, IL 60089-6900 U.S.A.  
(312) 541-9400

## TOSHIBA OF CANADA LIMITED

3680 VICTORIA PARK AVE.,  
WILLOWDALE, ONTARIO M2H 3K1 CANADA  
(416) 499-5555