User Manual
Of Digital Set Top Box

DVBS2
Digital Video
Broadcasting

USB

8888

POWER

Manhattan
RC-1978

Manhattan RC-1978

Please read this User Manual carefully to ensure proper use of this product and keep this manual for future reference

Table of Contents

Important Safety Instructions

***Warning:** To reduce the risk of electric shock, do not remove the cover or back.
There are no user-serviceable parts inside. Refer servicing to qualified personnel.
***Warning:** To prevent fire or electric shock hazard, do not expose the unit to rain or moisture.

*Do not expose the Adaptor and Set top box to water (dripping or splashing) and no objects filled with liquids, such as vases, should be placed on the unit.

*Keep the Set top box away from direct sunlight and heat source such as radiators or stoves.

*Do not block the ventilation openings. Slots and openings on the unit are provided for ventilation. The openings should never be blocked by placing your Set top box on a cushion, sofa or other similar surface.

*Do not place the Set top box on unstable cart, stand, tripod, bracket or table.
The unit may fall, resulting in possible damage or injury.

*Only use the AC adapter included with Set top box. Using any other adapter will void your warranty.

*Unplug the power from the outlet when the unit is not in use.

*Attention should be drawn to the environmental aspects of battery disposal.

*WARNNING: The battery (battery or batteries or battery pack) shall not be exposed to excessive heat such as sunshine, fire or the like.

*WARNNING: Excessive sound pressure from earphones or headphones can cause hearing loss.

*WARNNING: Only use attachments/accessories specified provided by the manufacturer, the Set top box is supplied by AC adapter, the AC adapter is used as disconnect device, the disconnect device shall remain readily operable.

Caution: Danger of explosion if battery is incorrectly replaced, replaced only with the same or equivalent type (Lithium battery)

The symbol indicates that dangerous voltages constituting a risk of electric shock are present within this unit.

The symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

The USB memory stick should be plug in the unit directly. USB extension cable should not be used to avoid failing of data transferring and interference caused.

This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased.
They can take this product for environmental safe recycling.

Front and Rear Panel Illustration

1. Front Panel
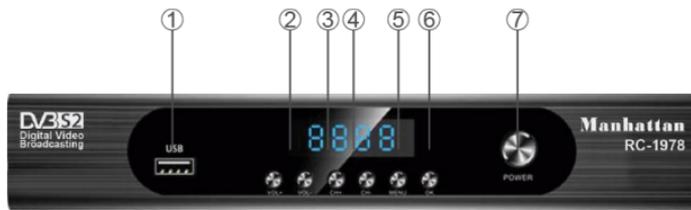
1.USB JACK: Used to connect to an external USB 2.0 device.
2.VOL +/-: Used to increase/decrease the volume without using the remote control.
3.LED DISPLAY: Used to display the time or channel information.
4. CH +/-: Selects the next/previous Channel without using the remote control.
5.MENU: Turns on main menu.
6.OK: Confirms an entry or selection.
7.STANDBY INDICATOR: Used to visually show power state of the STB.

2. Rear Panel
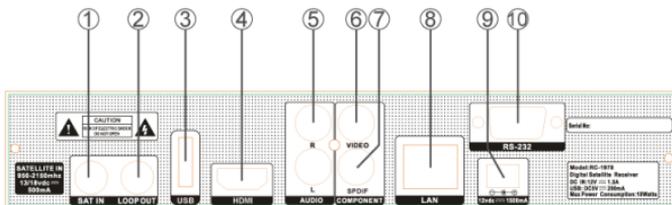
1. LNB IN: This socket connects the LNB to receive the signal.
2. LOOP OUT: This socket will bypass the RF signal to either your TV or another video system.
3. USB JACK: Used to connect to an external USB 2.0 device.
4. HDMI OUT: This socket connects to HDMI in device.
5. AUDIO L/R: This socket outputs analog audio L/R adapter.
6. CVBS: This socket outputs composite video signal.
7. SPDIF: This socket connects to a coaxial socket on your surround sound system.
8. LAN: Connect to RJ45 cable for internet connection
9. DC IN 12V: This is used to connect the 12V DC adapter.
10. RS232: Connect to serial port of PC for software update.

No	Button Name	Function
0	⏻ Set	Setting
1	Power	Turn the receiver on/standby
2	TV/Radio	Switch between TV and Radio
3	Mute	Mute
4~12	Numeric keys	Control the numeric operation
13	Recall	Return to the previous program
14	0	Numeric key
15	Menu	Call the main menu
16	EPG	Call the EPG information
17	EXIT	Exit the current operation
18	Up	Arrow key
19	Left	Arrow key
20	OK	Confirm key
21	Right	Arrow key
22	Down	Arrow key
23	VOL+	Volume up
24	VOL-	Volume down
25	Page+	Page up
26	Page-	Page down
27	Red key	Specific function in different cases.
28	Blue key	Specific function in different cases.
29	Green key	Specific function in different cases.
30	Yellow key	Specific function in different cases.
31	Info key	Display the current program's information
32	SUBT	Call Subtitle information
33	REC	Start Record
34	TEXT	Tetetext
35	FAV	Call the FAV list
36	◀◀	Fast rewind
37	▶▶	Fast forward
38	■	Stop
39	▶❚❚	Play & Pause
40	AUDIO	Call the audio information
40	Source	Change source
41	OK	Confirm Key
42	VOL-	TV Volume down
43	VOL+	TV Volume up

Remote Control
Installing the Batteries
Remove the battery cover from the remote control and put 2xAAA size batteries inside the compartment.
The diagram inside the battery compartment shows the correct way to install the batteries.
1. Open the cover
2. Install batteries
3. Close the cover

Using the Remote Control
To use the remote control, point it towards the front of the digital set top box. The remote control has a range of up to 7 meters from the set top box at an angle of up to 60 degrees. The remote control will not operate if its path is blocked.
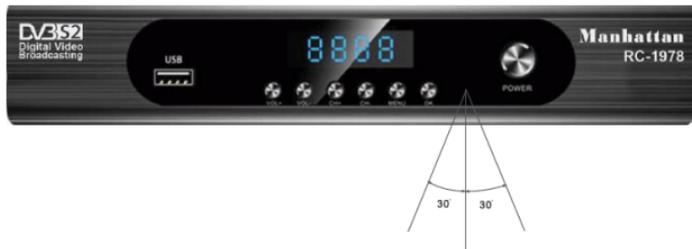
Note:
Sunlight or very bright light will decrease the sensitivity of the remote control.

Connections

Caution:
Make sure to check the voltage specification of the wall outlet is the same rating with the receiver. To prevent the risk of electric shock, do not open the cover or the back of the receiver.
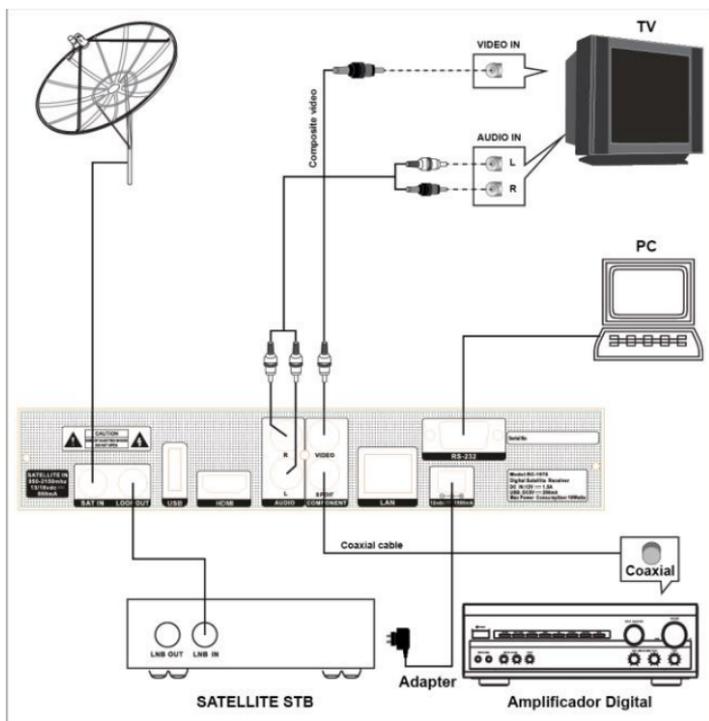
Note:
When connecting the receiver to other equipment, e.g., TV, VCR and amplifier, make sure to refer to relevant user manual for instruction. Also, make sure you disconnect all the equipments from the mains supply before the connection to the RF input of the box with coaxial cable.

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Quick Installation

(1) Unplug the set-top box and television.
(2) Connect the antenna to the RF input of the box with coaxial cable.
(3) Connect the audio out port and video out port on the box to the audio in port and video in port on the television respectively using audio/video cables.
(4) Plug and power on the set-top box and television.

Program Scanning
Satellite Setting

(1) Press MENU and go to Installation page.
    Select ANTENNA SETTING and press OK.
    Select SATELLITE LIST and enter a check mark on each desired satellite.
     Please note that Ku-band satellites are listed first, followed by C-band type.
     Note that only satellites that have been checked in the SATELLITE LIST
      can be scanned.   You cannot scan an unchecked satellite.   Exit and save.

(2) From INSTALLATION menu, select ANTENNA SETTING with OK button.
    Repeat the following for each satellite that you wish to use:
    Set LNB POWER to ON.
    Set LNB FREQUENCY to proper local oscillator setting
       (normally 5150 for C-band, 10750 for Ku-band, and Universal 9750/10600
        for Universal Ku LNBF.
    DiSEqC 1.0 and 1.1 settings should be set to OFF.
       (any DiSEqC switches should NOT be connected at this time).

(3) Make a decision on whether system will be motorized.
    Go to Installation menu, and select MOTOR SETTING, press OK
    Motor Type should be set to OFF if antenna is to be non-motorized, or if
    another device is used separately for Antenna motor control.

Continue installation instructions below MOTOR section if this is to be a non-motorized system.

MOTORIZED SYSTEMS:
If antenna is to be motorized, select either USALS or DiSEqC 1.2.
Use of either assumes that you have first mechanically aligned the DiSEqC motor to properly follow the geostationary satellite arc.   Study any instruction manual that came with your motorized system components.

DiSEqC 1.2 should be used on a conventional motorized installation.
Different parameters can be set, including East and West limits.
Individual satellites can be set and stored, using numbers starting with 1 as a reference to each satellite's position.   You should start with a plan on either the far east or the far west side of the satellite arc, so that all satellites are listed and stored sequentially (1, 2, 3 …).   Take notes as you align and store each satellite.

USALS is a time-saving feature that can be used to more easily locate all satellites, provided that you have done a proper mechanical alignment of the mount and motor. It also depends upon putting exact local LONGITUDE and LATITUDE information for your location into the receiver's memory. A mathematical calculation that is the result of all of this information will automatically align predicted dish positions for each satellite, assuming that everything has been done properly. IF you do the math and mechanical alignments less than perfectly, the USALS system CANNOT be expected to work properly. In that situation, one can sometimes use DiSEqC 1.2 Mode on individual satellites to store them as best as possible. A proper mechanical adjustment is much more preferable, simply to minimize frustration.

USALS MOTORIZATION—continued

After selecting USALS motor type, enter LOCAL LONGITUDE and LOCAL LATITUDE in decimal degrees. Confirm that Longitude is WEST for North American locations, and that Latitude is NORTH. SAT LONGITUDE for most Ku-band DiSEqC systems should be set at 097.0 West, or the Galaxy 19 satellite.

SATELLITE SEARCHING
While in INSTALLATION section, under ANTENNA SETTING, satellite scanning can be done. After all other parameters have been properly entered, toggle down to START SEARCH and then toggle left to right to select SATELLITE, BLIND or TP

SATELLITE gives you three subsettings to select. FTA ONLY, TV/RADIO, NIT.
If you select SATELLITE, small box labeled SATELLITE SEARCH will appear in the center of the screen.

FTA ONLY should normally be set to YES so that only non-scrambled channels are saved. If you select NO and then SEARCH, ALL possible channels will appear, including scrambled signals. This creates extra work as each non-wanted channel must be manually deleted.

TV/RADIO has choices of ALL, TV or RADIO. Unless you don't want radio at all, ALL is normally selected so that everything is scanned.

NIT SEARCH is normally set to NO, unless you want a thorough but often time-consuming search of unknown signals.

BLIND gives you a choice of a regular Blind Scan for unknown channels.
The above FTA ONLY and TV/RADIO choices are available in Blind mode.
There is no NIT SEARCH mode, which must be accessed by first entering SATELLITE instead of BLIND scanning mode. If you want a relatively quick scan for unknown channels, choose BLIND. Otherwise SATELLITE then NIT SEARCH for a deep scan.

TP provides an individual Transponder scan.
You can make FTA ONLY, TV/RADIO or NIT SEARCH options in this mode.
This might be useful when choosing an individual transponder, then NIT SEARCH for a deep scan of channels found only on that TP, rather than across the entire satellite.

Setup Shortcut

Go to www.manhattan-digital.net and download the appropriate (C/Ku or Ku-band) Manhattan RC-1978 file.   Save to your computer, and then make a copy on a USB memory stick.   Insert USB stick into a spare USB port on your receiver.

As a continuing long-term service to its customers, Manhattan-Digital will make available on its website a separate Ku-band only as well as C/Ku band downloadable files for the RC-1978 receiver.

These may be slightly different from the original files you may have received with your receiver, as some satellite dealers may have created their own files.   But it is a resource that is intended to be there to provide an emergency fix for anyone that mistakenly "Resets To Factory Values" purposely or by accident.   Or is otherwise in need of a basic setup file for satellites and transponders that are ready to go.
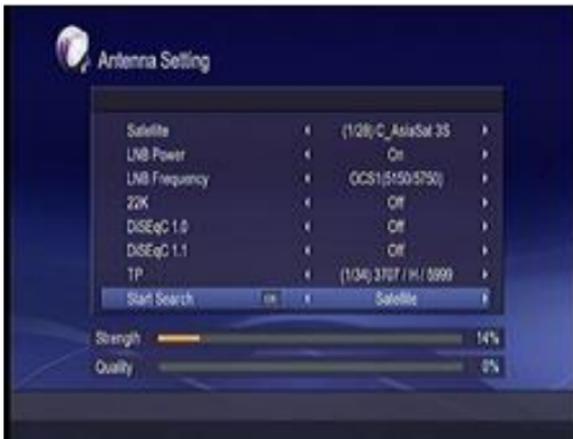
DTV OPERATION

When your receiver is powered on, a press on the Menu button will bring out the main menu. Toggling left and right will give us the main areas of the receiver, with submenus below each:

CHANNEL EDIT
TV Channel
Radio Channel
Delete All

SYSTEM SETTING
Time Setting
Timer Setting
Lock Control
AV Setting
Network Setting

INSTALLATION
Antenna Setting
Motor Setting
Satellite List
TP List

UTILITY
System Information
Factory Reset
Game Center
Software Upgrade
Network

MEDIA CENTER
Media Player
PVR Management
Record Files
IPTV
Weather

Wired vs. Wireless Network

The IPTV Connection will identify either a wired (RJ45 cable) or a wireless connection (external IPTV antenna connected via USB port). If RJ45 cable or USB-connected IPTV antenna are in place, go to NETWORK SETTING screen under System Setting. Please note that you can only connect cable or Wi-Fi antenna separately one at a time. System will be disabled if you attempt to use both connections at the same time.

Appropriate settings can be made in NETWORK SETTING area, including DEVICE, MODE and TYPE. Once you have made entries, press the GREEN button to SCAN, which should acknowledge a connection. In Wireless mode, select desired network and press OK.

System Setting

While in SYSTEM SETTING menu, subdirectories can be accessed to change system parameters or to locally customize settings. These include TIME SETTING, TIMER SETTING, LOCK CONTROL, AV SETTING, and NETWORK SETTING.

While you can set your local time zone, please note that the time will only be displayed correctly when connected to the Internet.

AV SETTINGS (Audio-Video) should be left in factory default mode unless there is a reason or a need to change them. Before changing anything, please confirm that your TV device can support the mode(s) that you select. Within the AV SETTING area, there are abilities to made custom settings for LANGUAGE, OSD (On Screen Display), and COLOR.

Most settings are self-explanatory, dropping down through menus, and making the appropriate selections for your requirements.

Loading Upgrade Files Into Receiver

Confirm full name of upgrade file before using. Write it down.
It should have a .bin Suffix and be larger than 8 Mb in size.

Assuming that you have proper file on a USB memory stick, install it via a spare USB port on your Manhattan RC-1978 receiver. Power receiver ON.
Press MENU and toggle left/right to UTILITY page.
Select SOFTWARE UPGRADE and press OK.
Under UPGRADE TYPE, select USB UPGRADE and press OK.
Under SECTION, choose one of the following as it applies:
    ALL—to install firmware and programming.
    APP—to install specific applications.
    USER DATA—to install user data
    ETC—(future choice as required)
Under FILE PATH, select OK. Under START, Press OK.
Updated file should make changes and save them.

Exporting Files from Receiver to USB Memory Stick

Press MENU and toggle left/right to UTILITY page.
Select SOFTWARE UPGRADE and press OK.
Under UPGRADE TYPE, select DUMP.
Under FILE PATH, press OK. Confirm that you are saving to proper drive.
Under START, Press OK. Heed the warning not to cut off the power, and wait.
File should normally save as a 16 Mb .bin type file.
Save a spare copy from USB stick to your computer drive.

STANDBY

Press [STANDBY] key, you can enter the Standby state;

In Standby state, press [STANDBY] key again, you can call back the unit and go on playing the channel;

User can also switch off the STB to end the Standby state by press the [Device's Main Power];

Channel Up / Channel Down

In full screen, press[▲ ▼] to change channel. You can change channels in channel list too.

Volume Up/Volume Down

In full screen, press [/] to adjust volume.

OK

In full screen, press [ok] key, you can enter "Channel list".

Press [▲ ▼] key to move highlight and press [ok] key to play the highlighted channel.

Press [   ] key to select channels from a particular satellite.

FIND

Press [LIST] key to open "Find" window. Here you can find channel you want to watch by its name.

ZOOM

The zoom function allows to magnify a certain area on the images. Just press [] key in full screen.

Press [ ] key again, the image will enlarge rotate as ×1, ×2, ×4.

In zoom mode, press [EXIT] key to close "zoom".

MEDIA

Press [MEDIA] key to enter "media player" in full screen. There you can play MP3/video/book/picture.

FAST SCAN

Press [USB] key to search satellite by auto scan.

INFO

Press [INFO] key once, you can see basic information of the channel you watch.

Press [INFO] key twice, you will enter the signal indicator window. There you can check the strength/quality/video format / audio format etc.

Media Center

Media center will be used when USB device is plugged. When you enter to "Media Center" menu, you will see a screen as below

Media Player

First you enter media play window，the highlight is on the "File" menu. Press [/] to select mode among Video/Music/Picture/Text.

Press [ok] to confirm. Press [EXIT]/[MENU]/ to exit.

File mode: In this mode, you can play every kind of media format, for example: Music/Video/Picture. But it is not very convenient when you just want to play a kind of media mode，take music for example. Now you can move highlight to the other mode, as bellows:

Video mode: Select "Video" menu, then all the useable video files will display on the screen. When you are playing it, press [ok] key, you will see picture as below:

Here，you can page up/down, pause, play, check the size of the video and so no. The STB support

.MP4/.AVI/.MKV/.FLV/.MPG/.VOB/.TS etc.

Music mode: Press [ok] key to move highlight to directory and you can see picture as bellows

Picture mode：You can browse pictures by entering "Picture" menu. You can browse one by one or enjoy automatically.

Text mode: Enter the "Text" menu, select a Text to look at it. When you read the text again the open, it will be prompted whether to continue the last view of the page.

Record Files

Move the highlight to "Record Files" and press [ok] key. It will display "Record Files" as below:

Troubleshooting

Problem	Potential Reasons	What to do
No picture	Power isn't connected	Connect the power
	The power switch is not on	Switch on the power
Screen shows No Signal	DVB-S cable not connected	Plug in the DVB-S cable
	Incorrect setting	Set up correctly
No sound from speaker	No or incorrect connection with audio cable	Connect the audio cable properly
	Mute the sound	Switch on the correct volume control
	Incorrect soundtrack	Try another sound track
Only sound, no image on the screen	No or incorrect connection with AV cable	Connect the audio cable properly
	The program is a radio program	Press <TV/RADIO> key to shift into TV mode
Remote control unit does not work	The battery is exhausted	Change new battery
	Remote control unit is not in the right opposite of the front panel or too far from it	Point more directly at the STB with remote control, and move closer

Picture image freezes or is intermittent	The signal is too weak	Align the antenna and LNBF for best quality reading

Specifications

Item	Specification	
Tuner	Frequency Range	950MHz to 2150MHz
	Input Impedance	75Ohms unbalanced
	Signal Input Level	-65 ~ -25dBm
	Symbol Rate	2-45Mbps
	LNB Power	13/18V,Max500mA
Demodulation	Demodulator	QPSK/8PSK
	FEC	1/2,2/3,3/4,5/6,7/8,8/9,9/10
Connections	LNB IN	F connector
	LOOP OUT	F connector
	CVBS	Connect to your TV using RCA
	COAXIAL	RCA,for SPDIF digital audio output
	HDMI	Connects to HDMI in device.
	RS232	Used for data transport
	USB	Connect to an external USB 2.0 device.
Power	Input	DC 12V
	Consumption	Max 18W
Display	Decoder Module	PAL,NTSC
	Resolution	720X576(PAL),720X480(NTSC), 720P,1080i
Decoding	Aspect Rate	4:3(Letterbox, Pan& Scan)16:9
	Video	MPEG2 Transport MP@ML.HL
		MPEG4 AVC/H.264HP@L4
	Audio	MPEG2 Audio Layer I&II
Others	Compliance	ETSI/EN 300421 DVB-S compliant
	Sound Mode	Right, Left, Stereo

*Specifications are subject to change without further notice

[Service]

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