Intellian®

Multi-satellite Interface Module(MIM)

Installation and Operation User Guide

Doc. No. UM-MM-170331-V1.3

	MIM Serial Number	
This	serial number will be requested for all troubleshooting or service Inquir	ies.
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Introduction

Introduction to Intellian Dish Network Multisat Interface Multi-switch

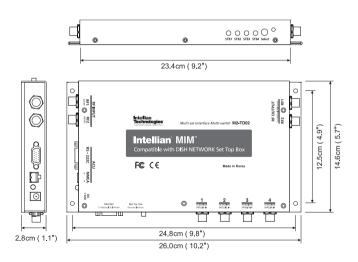
The Intellian's Multi-sat Interface Multi-switch (MIM) utilizes a leading-edge technology which replaces the Dish Network DP-34 multi-switch. The user oriented design of the MIM offers Dish Network subscribers access to their favorite high-definition (HD) programs and switches automatically between Dish Network 110°W, 119°W, and 129°W satellites or alternatively between satellites 61.5°W,110°W, and 119°W. If you are in certain areas of the east coast or south Texas, you may not be able to view HD programs from the 129° satellite based on your geographical location. Therefore, instead of selecting the 129° satellite, you can select the 61.5° satellite which carries the same programs as the 129° satellite.

Intellian recommends using a Dish Network model ViP211 HDTV receiver for automatic satellite switching. The MIM module has four receiver connector ports. Intellian's MIM allows you to select which receiver connected to the MIM will be the "Master" receiver. The "Master" receiver will control which satellite the antenna is focused on. You can simply choose your desired channels by using the receiver's remote control through the Master receiver, and the Intellian i-series will automatically switch to the appropriate satellite.

Install the MIM

MIM Dimensions

You will need to wire the Intellian i-series system differently than specified in i-Series manual. These instructions require additional installation steps. The following instructions and configuration diagram will explain how to modify your system for MIM use.



Installation Site

The MIM should be installed below deck, in a location that is:

- Dry, cool, and ventilated.
- Easily accessible from your main TV viewing area.

Power Requirements



1000mm (39.37")

 DC plug cable: Connect the DC plug cable to use DC power source from the i-Series ACU. (The DC out port is supported on the "B4-XXX" i-Series ACU)



AC-DC Adaptor

AC-DC Adaptor: Connect the AC Adaptor if using an AC power source.
 Input 100-240V AC 50/60Hz, Output: 12V DC 3.33A

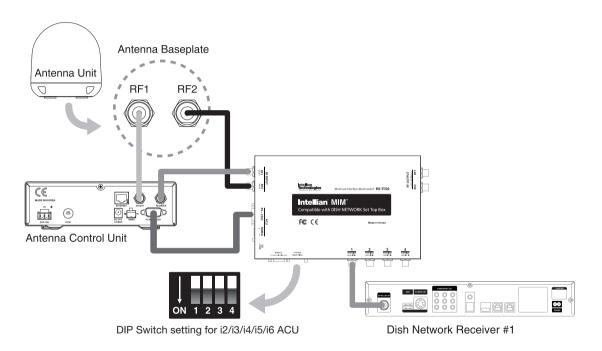
Note: For your own safety, make sure to disconnect power from all wired components (i.e., antenna control unit and satellite receiver) before performing this procedure.

Connect the Cables to the MIM

Single Receiver Installation

- Connect the RF cable from the "RF1" connector on the antenna to the "ANT.RF" connector on the rear panel of the Antenna Control Unit (ACU).
- Connect the RF cable from the "RECEIVER" connector on the rear panel of ACU to the "RF INPUT-RF1" connector on the MIM.
- Connect the RF cable from the "RF2" connector on the antenna to the "RF INPUT-RF2" connector on the MIM.
- Connect the RS-232C cable from the "PC interface" connector on the rear panel of the ACU to the "ACU-RS-232C" connector on the MIM.
- 5. Connect the RF cable from any "TO RECEIVER SATELLITE IN" on the rear of the MIM to the "Satellite In" on the rear panel of the receiver.
- 6. Push the "Select" button on the front panel of the MIM to setup the "Master" control (Refer to Page 12).

Note: Intellian's MIM requires setting the DIP switches for SYSTEM SELECTION. When connecting to an ACU using the RS-232C cable from the PC interface connector on the rear panel of ACU to the "RS-232C" connector on the first MIM, the DIP switches must be set to the UP position.



Configuration with i2 / i3 / i4 / i5 / i6

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Multi-Receivers (up to 4) Installation

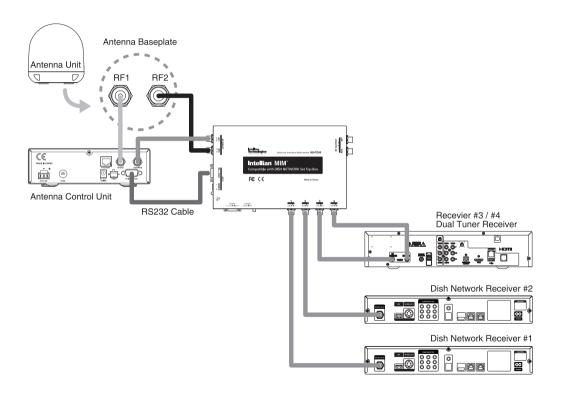
- Connect the RF cable from the "RF1" connector on the antenna to the "ANT.RF" connector on the rear panel of the Antenna Control Unit (ACU).
- Connect the RF cable from the "RECEIVER" connector on the rear panel of the ACU to the "RF INPUT-RF1" connector on the MIM.
- Connect the RF cable from the "RF2" connector on the antenna to the "RF INPUT-RF2" connector on the MIM.
- Connect with the RS-232C cable from the "PC Interface" connector on the rear panel of ACU to the "ACU-RS-232C" connector on the MIM.
- 5. Connect the RF cable from any "TO RECEIVER SATELLITE IN" on the rear of MIM to the "Satellite In" on the rear panel of the receiver.
- If you have more than one receiver, repeat step 5 to connect RF cables between the other receivers and the MIM connectors.
- 7. After completing connections, select one as "Master" by pushing the button on the front panel of the MIM (Refer to Page 12).

Dual Tuner Receiver Installation Instructions

- Connect the RF cable from any "TO RECEIVER SATELLITE IN" on the rear of the MIM to the "Satellite 1" on the rear panel of the receiver.
- Connect the RF cable from any "TO RECEIVER SATELLITE IN" on the rear of the MIM to the "Satellite 2" on the rear panel of the receiver.

Note: Each tuner requires a separate coax to the MIM. Do not use the DISH Network Dish Pro Plus DPP Separator P/N: 123254

The video output from the dual tuner receiver changes between tuner A and tuner B when powered up. You may need to press the button on the front panel of the MIM to change the "Master" status after the receiver has been restarted.



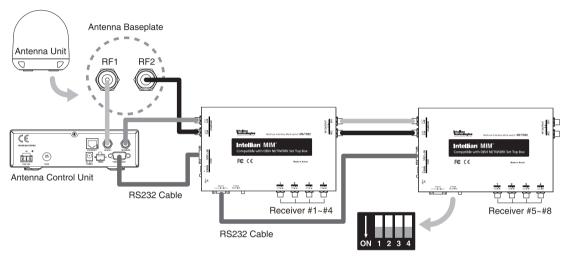
Configuration with Multi-Receiver & Dual Tuner Receiver

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Multi-Receivers (more than 4) Installation

- 1. You must have two or more MIM units to start with this installation.
- 2. Connect the RF cable from the "RF1" connector on the antenna to the "ANT.RF" connector on the rear panel of the Antenna Control Unit (ACU).
- Connect the RF cable from the "RECEIVER" connector on the rear panel of the ACU to the "RF INPUT-RF1" connector on the first MIM.
- Connect the RF cable from the "RF2" connector on the antenna to the "RF INPUT-RF2" connector on the first MIM.
- Connect with the RS-232C cable from the "PC Interface" connector on the rear panel of ACU to the "ACU-RS-232C" connector on the first MIM.
- Connect the RF cable from the "RF OUTPUT-RF1" connector on the right side of the first MIM to the "RF INPUT-RF1" connector on the left side of the secondary MIM.
- Connect the RF cable from the "RF OUTPUT-RF2" connector on the right side of the first MIM to the "RF INPUT-RF2" connector on the left side of the secondary MIM.

- Connect the RS-232C cable between "To additional Multi-Switch" connector on the first MIM and "RS-232C" connector on the secondary MIM.
- 9. If you have more than two MIM units, repeat steps 6 to 8.
- 10. Connect the RF cable from any "TO RECEIVER SATELLITE IN" on the rear of first MIM to the "Satellite In" on the rear panel of the receiver.
- 11. For each additional receiver, repeat step 10 and connect RF cables between the other receivers and the MIM connectors.
- 12. If you have more than four receivers, repeat step 10 to connect RF cables between the other receivers and the secondary MIM con nectors.
- 13. After all connections are completed, select one as "Master" by push ing the button on the front panel of any MIM (Refer to Page 12).



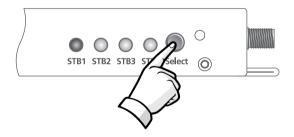
DIP Switch setting for i2/i3/i4/i6 ACU

Configuration with Multi-Receiver (more than 4)

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Select the Master Control Function for Connected Receivers

Intellian's MIM allows you to select which receiver connected to the MIM will be the "Master" receiver by pressing the "Select" button on the front panel of the MIM.



- 1. When you have a receiver connected to "TO RECEIVER SATELLITE IN" number 1 of the MIM, the STB1 light turns on when you push the but ton the first time. If there are no other connections with other receivers, the STB1 light will stay on even if the button is continuously pushed.
- 2. If you have other receivers connected, the STB light will move from STB1 through STB4 when the button is pushed. This light means the receiver using this connection will be the "Master". You can designate any receiver as the Master using the "Select" button.
- 3. When using multiple MIMs, first select a Master MIM. When the but ton on the Master MIM is pushed, all lights on the other MIMs turn off because only one MIM can be a Master. Once the Master MIM is selected, you can select STB1 through STB4 as the Master receiver using the "Select" button.

You simply choose your desired channels by using the receiver's remote control through the Master receiver. The Intellian i-series antenna will automatically switch to the appropriate satellite based on the last channel selected.

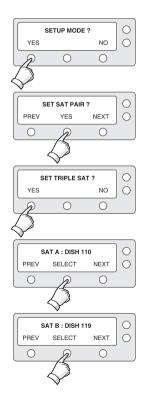
Setup the Antenna Control Unit

In order to configure the correct set of satellites for MIM to use, follow the instructions below on the ACU.

ACU setup should be Triple Sat as follows:

Set as	Satellite
Sat A	DISH110
Sat B	DISH119
Sat C	DISH129 /DISH 61.5

1. Enter SETUP MODE and SET SAT PAIR MENU.



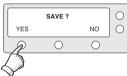
1. Press YES to enter setup mode.

2. Press YES to set satellite pair.

3. Press YES to set triple satellite.

- Set satellite A
 Press PREV to show previous satellite name.
 Press SELECT to set chosen satellite to SAT A.
 Press NEXT to show next satellite name.
- Set satellite B
 Press PREV to show previous satellite name.
 Press SELECT to set chosen satellite to SAT B.
 Press NEXT to show next satellite name.

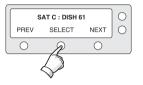




Set satellite C
 Press PREV to show previous satellite name.
 Press SELECT to set chosen satellite to SAT C.
 Press NEXT to show next satellite name.

Press YES to save selections.
 Press NO to cancel and return to main setup mode.

2. Follow this procedure to select the 61 ° satellite instead of the 129 ° satellite.



Set satellite C
 Press PREV to show previous satellite name.
 Press SELECT to set chosen satellite to SAT C.
 Press NEXT to show next satellite name.



Press YES to save selections.
 Press NO to cancel and return to main setup mode.

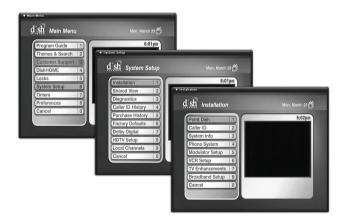
Setup the Receiver Setup and Test "Check Switch"

After all cables are connected completely, turn on the power for the ACU. When the ACU indicates "Tracking" from the target satellite, turn on the satellite receiver. You will initially see this message on the TV screen as below.



In order to load the information from the Intellian MIM into the receiver, you will need to complete the "Check switch". Test following the steps below.

 On the remote control, press menu, select "#6 System Setup", "#1 Installation" and then "#1 Point Dish" to enter the "Check Switch".



2. Select "Check Switch" button and select "Test". Be sure that "Super-DISH" and "Alternate" are NOT checked.





3. Wait until the message "Currently doing test #3 of 3" appears. This indicates the test is completely done. If the message is different, check your connections again. Make sure the receiver you are run ning the "Check Switch" on is designated as the Master receiver. With dual tuner receivers, wait for the "Satellite Input2" test to be com pleted. This may take a few minutes.



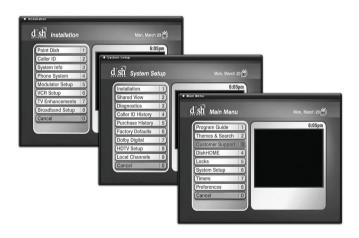
4. After the test is finished, you will see the message with "OK" for all three satellites dishes 110 °, 119 ° and 129 ° (or 61 °). With dual tuner receivers, you will see the same results for "Satellite Input 2". Select the "Done" button to go to the Point Dish/Signal screen.



5. Select the "Done" and "Cancel" button to exit menu.



6. At this point, the receiver begins the procedure to download the program guide information. When the message below displays, follow the instructions and do not disturb the receiver until the TV displays video.



7. If you have other receivers connected to the MIM, set each receiver as a Master (Refer to Page 10) and repeat these procedures from 1 to 6.



Note: When AC power has been removed from the Dish Network receiver, there is a 5 to 10 minute initialization period when power is restored. This is an unavoidable requirement of the Dish Network receiver, not a function of the Intellian antenna system.

Technical Specification

Physical

Dimensions(WxDxH) 10.2"(26cm) x 5.7"(14.6cm) x 1.1"(2.8cm)

Weight 1.4 lbs. (0.64 kg)

Environmental

Operating temperature range $5^{\circ}F \sim 130^{\circ}F (-15^{\circ}C \sim 55^{\circ}C)$

Storage temperature range $-13^{\circ}F \sim 158^{\circ}F (-25^{\circ}C \sim 70^{\circ}C)$

Approvals CE/FCC

Warranty 3 Years

Interface

RF Port 2 x 4 Multi S/W and Expansion 2RF Ports

PC Interface RS232 - DB9
ACU Interface RS232 - DB9

Control Key One Integrated Push Button

Display 4 LEDs

Power Input 12V DC (Max 10W)

Adaptor: Input 100-240V AC 50/60Hz,

Output: 12V DC 3.33A

Warranty

This product is warranted by Intellian Technologies Inc., to be free from defects in materials and workmanship for a period of THREE (3) YEARS on parts and TWO (2) YEARS on labor performed at Intellian Technologies, Inc. service center from the purchased date of the product.

Intellian Technologies, Inc. warranty does not apply to product that has been damaged and subjected to accident, abuse, misuse, non-authorized modification, incorrect and/ or non-authorized service, or to a product on which the serial number has been altered, mutilated or removed.

It is required to present a copy of the purchase receipt issued by Intellian Technologies, Inc. that indicates the date of purchase for after-sales service under the warranty period. In case of failure to present the purchase receipt, the warranty period will begin 30 days after the manufacturing production date of the product purchased.

Any product which is proven to be defective in materials or workmanship, Intellian Technologies, Inc. will (at its sole option) repair or replace during the warranty period in accordance with this warranty. All products returned to Intellian Technologies, Inc. under the warranty period must be accompanied by a return material authorization (RMA) number issued by the dealer/distributor from Intellian Technologies, Inc. and a copy of the purchase receipt as a proof of purchased date, prior to shipment. Alternatively, you may bring the product to an authorized Intellian Technologies, Inc. dealer/distributor for repair.

Additional Terms and Conditions;

The warranty(THREE (3) YEARS on parts and TWO (2) YEARS on labor) is effective only for products purchased since January 1st, 2017.