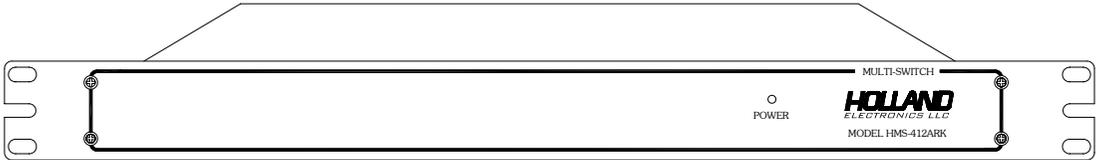


HMS-412ARK

SATELLITE MULTI-SWITCH



The HMS-412ARK is a 14V/0KHz, 18V/0KHz, 14V/22KHz, 18V/22KHz satellite multi-switch used in applications that require satellite I.F. distribution from 950-2150MHz. It allows the user to take four LNB outputs and provide inputs to a maximum of twelve receivers. The HMS-412ARK routes any of the inputs to any of the outputs by utilizing the 14V/0KHz, 18V/0KHz, 14V/22KHz, 18V/22KHz switching control from the satellite receivers.

- Provides RHCP and LHCP switching for 12 receivers
- Matrix routes any satellite receiver output to any satellite LNB input
- Input selected by 14/18V and 0/22KHz from satellite receiver
- Built-In 22KHz tone generator.
- Built -In SMPS support all LNB'S power requirements
- Built -In amplifier to compensate for multiswitch insertion loss.

HOLLAND ELECTRONICS LLC LIMITED WARRANTY

Holland Electronics LLC, warrants that the product enclosed with this Limited Warranty statement will conform to the manufacturer's specifications and be free of defects in the workmanship and material for a period of five years (5) from the date of original purchase.

WARRANTY PROCEDURE:

If the product appears to be defective, contact Holland Electronics LLC at (805) 339-9060. We will analyze the problem and offer solutions to prevent removing the unit from service. If the unit is to be returned for evaluation, you will be issued a Return Material Authorization (RMA) number.

Holland Electronics LLC will, at its option, repair or replace the defective unit, under warranty, without charge for parts or labor. This repair will be subject to charges if signs of tampering or misuse are detected. Incoming shipping costs will be the customer's responsibility. Returns will not be accepted without an RMA number.

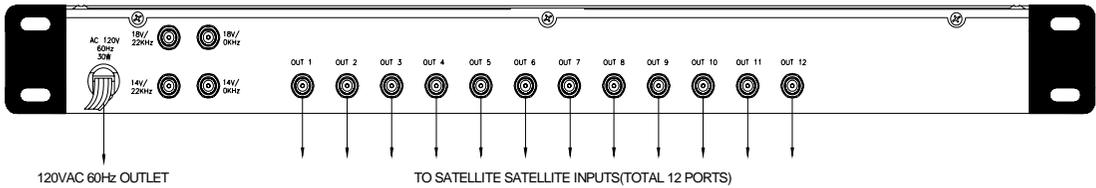
The warranty and remedy provided above are exclusive and in lieu of all other express warranties and unless stated herein any statements or representations made by any other person or firm are void. The duration of any implied warranties of merchantability or fitness for a particular purpose on this product shall be limited to the duration of the express warranty set fourth above. Except as provided in this written warranty, Holland Electronics LLC shall not be liable for any loss, inconvenience, or damage, including direct, special, incidental, or consequential damages resulting from the use of inability to use this product, whether resulting from breach of warranty or any other legal theory.

Some states do not allow limitations on how long an implied warranty lasts and some states do not allow the exclusion or limitation of incidental or consequential or consequential damages, so the above limitation and exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

To arrange for Warranty Service: Call Holland Electronics LLC (805) 339-9060

INSTALLATION INSTRUCTIONS:



1. Connect the 18V/0KHz, 14V/0KHz, 18V/22KHz, 14V/22KHz output LNB cables to the appropriate input ports on the rear of the HMS-12ARK.
2. Connect "OUT 1" thru "OUT 12" via coax to up to as many as 12 satellite receivers.
3. Plug in the HMS-12ARK to the AC power source.

Specifications:

LNB output Frequency: 950-2150MHz

Insertion loss:

950-1450MHz	2 dB typical
1450-2150MHz	0 dB typical

Isolation:

Cross Polar Isolation	-30 dB typical
Output to Output	-28 dB typical
Current consumption	60mA

Switching voltage

13/14vdc	RHCP
17/18vdc	LHCP

Power supply: 120 \pm 10% VAC 60 Hz

Dimensions: 19" L x 5.67" D x 1.75" H

22KHz tone output: 22 \pm 4 KHz continuous
650 \pm 300mv pp.

IMPORTANT!!

WARNING: Holland Electronics LLC does NOT represent this product to be WATERPROOFED. To reduce risk of electrical shock, fire hazard, or damage to the unit, do not expose to rain or moisture.

CAUTION: To prevent electric shock, do not use this plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

NOTE TO INSTALLER: This reminder calls the system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

WARNING:

TO PREVENT FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE