Replacing or adding an Input or Output card in a Radiance Pro

Introduction

This application note provides instructions for replacing, or adding, an input, or output, card to a Radiance Pro.

If you are adding a new I/O card (rather than replacing a card) it comes with two "hex standoffs" used to position the card above the main circuit board, and two M3 screws to hold-down the new card.

Peel-and-stick labels (e.g. 9 GHz) are included as appropriate to put below the connectors as a visual reference. Note that these may not be needed depending on the version of the case back silkscreen already on the unit.

Tools

- Philips #2 screwdriver for cover
- Philips #1 screwdriver with **hardened tip** for HDMI connector screws and I/O card.
- Xacto™ blade knife to help remove the 9 GHz, 18 GHz, or Audio, label from the sheet and apply to the case.

Installation Procedure

1. Update to latest software and confirm unit is working with the new release.
2. Set the unit on a table and touch the case with both hands to reduce the chance of ESD damage.
3. Use the Philips #2 screwdriver to remove the ten screws holding the cover, and remove the cover.
4. *NOTE: Populated inputs must start at Input 1 and contiguously increase up to the highest numbered input, but 18 GHz input cards can be intermixed in any order with 9 GHz input cards.*
5. Remove the two black Philips screws on the back of the HDMI connectors for each card being replaced or added. If the screws were holding a HDMI blank plate, set it aside.
6. For the 444X models if unit will have one 18 GHz output card, install it as Output 3 and 4*.*
7. If replacing a card, remove the two M3 Philips screws holding the card in place and remove the card. *NOTE: Press down hard with the Philips #1 screw driver when removing the screws to avoid damaging the head of the screw. If you inadvertently damage a Philips head, a pair of pliers can be used to twist the screw to loosen it.*
8. If adding a card to an empty slot, install the two hex standoffs provided (if not already installed). *Be very careful to not overtighten.*
9. Remove the new card from its ESD bag by holding it at a M3 screw mounting-hole pads, or HDMI connector. While still holding the card, touch the case with the hand holding the card to help prevent ESD damage.
10. Install the new card. *The best procedure is to plug-in, remove, and plug-in the card three or four times. This helps wipe the contacts and insure the best connection.*
11. Install the two black HDMI screws on the back of the unit for the new card. *Do not overtighten.*
12. Install the two zinc-plated M3 screws that hold the card down. *Do not overtighten.*
13. Add the "9G," "18G" or "Audio" labels under the HDMI inputs and/or outputs on the back as appropriate. *NOTE: For 18 GHz output cards the odd output is audio-only ("Audio") and the even output is 18 GHz video and/or audio ("18G").*
14. Reinstall the cover.
15. The Radiance Pro will recognize the new card(s) automatically.

Radiance Pro 444X Example Input Section