How to Upgrade an RC-03 to RC-04 using the adapter cable:

The adapter cable will assist in a simpler transition when upgrading an RC-03 to an RC-04. By using the adapter cable you do not need to run a new 8 wire pigtail, you can use the existing 12 wire pigtail and the adapter will re-orient the RC-03 pigtail conductors to the RC-04 pigtail color code. The wire colors changed from the RC-03 pigtail to the RC-04 pigtail and therefore requires that you update the connections at the end of the 12 pin pigtail to the peripherals at the door.

Wiring Concept:

Step by Step Process:

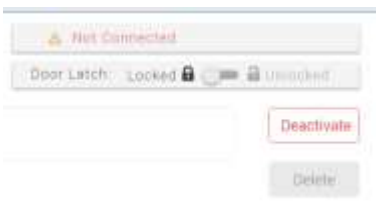
1. Review the current wiring at the door
2. Determine if extra hardware or alternative wiring is needed (uncommon). See below for some scenarios that you may run into out in the field:

Scenarios:

   a. If the RC-03 is powered by 24vdc then a change must be made; the RC-04 only accepts 12V DC or PoE power. Either power the RC-04 by PoE or use a Altronix VR3T to "step down" the 24vdc to 12vdc.
   b. If there is 24vdc to the lock using the RC-03 internal relay, then either an ISONAS Advanced Security Module (previously EDK) (secure) or Altronix RBSN (unsecure) is needed.
   c. If there is a 12vdc lock drawing more than 600ma and no Advanced Security Module, then an ASM or RBSN will be needed. (The output on the RC-04 will only provide up to 600ma out)
   d. If both the AUX and REX are used, they will need to be condensed into one input (called AUX or REX on the RC-04).
   e. If TTLs or a WIM are being used, please consult ISONAS pre-sales for alternative solutions at support@isonas.com.

3. Disconnect the RC-03
4. Rewire the connections according to the RC-04 wiring diagram, for more information click here.
5. Install the RC-04, see our quick install up guide here.
6. Next you will need to configure the new reader and connect it to Pure Access
7. Log into Pure Access, edit the existing access point and take a screenshot of the information. ***Do not deactivate the access point and replace it with the RC-04!**
8. Deactivate and then delete the access point.

First Deactivate the access point



Then Delete the access point

9. Add in the RC-04 as a new access point using the information from the screenshot.
10. Run Update and test

Wiring Conversion Chart, which RC-03 pigtail wires match the RC-04

RC03 Cable Color Code (Standard RC03 Pigtail colors)	Cable Adaptor Cable Color Code (Standard RC04 Pigtail color)	Notes
Red (12V in/out) or (24V in)	Orange (See Note) (12VDC in/out)	Important: Validate that any input DC Power is 12VDC RC04 is not **designed for 24VDC** operation. Attaching 24VDC to the RC04 will invalidate the unit's warrantee and may damage the unit.
Black (Common)	Black and/or Brown	RC04 supports two "common" conductors, to simplify connecting multiple devices to the "common". These BLACK/BROWN conductors are interchangeable.
Tan (FailSecure)	Red	Host software must be configured for "FailSecure" operation. Assumes the previous RC03 did not use the PINK wire.
Gray (FailSafe)	Red	Host software must be configured for "FailSafe" operation. Assumes the previous RC03 did not use the PINK wire. If your installation was using an ACC-IRS-4000 in-rush suppressor (IRS), assure the IRS is installed between the 12V source, and the lock.
Pink (Relay In)	Not used	If the PINK wire was used, then the RC04 installation will need an EDK installed to control the voltage/signal that was supplied on the RC03's PINK wire. If your installation was using an EDK, the PINK & TAN wires will be replaced by the RC04's YELLOW and WHITE. Please refer to the PureIP Installation Guide for more details on the installation of the EDK
Green (REX)	Green (see note)	Host software must be configured to process this input as a "REX". RC04 supports either a REX or AUX. If both were in-use, select the most desirable feature for that door.
Blue (Door Sensor)	Blue	Direct replacement of the RC03's function
Orange (AUX)	Green (see note)	Host software must be configured to process this input as an "AUX". RC04 supports either a REX or AUX. If both were in-use, select the most desirable feature for that door. Any existing RC03 AUX input connection **must** be disconnected from RC04's ORANGE wire. If the RC04's GREEN wire is being used as a REX input, then disconnect the AUX device from the RC04.
Purple (TTL1)	Not Used	Feature is not supported by the RC04
Brown (TTL2)	Not Used	Feature is not supported by the RC04
Yellow (RS232)	Not Used	Feature is not supported by the RC04
White (RS232)	Not Used	Feature is not supported by the RC04