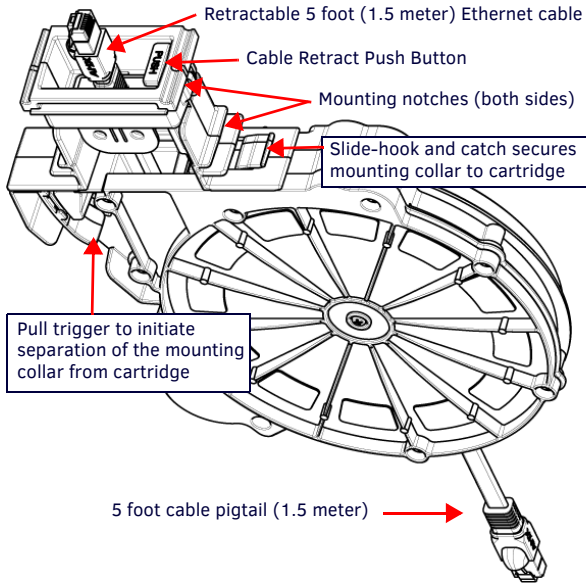## Overview

The HydraPort® Retractable Cable Module is designed to be used in conjunction with the HPX-600/900/1200 or the Hydraport Touch (7"/10") Connection Port base assembly, to provide the convenience of various types of cables in a HydraPort System.

The **HPX-N102-ETH-R** Cat6 Ethernet Module with Retractable Cable (FG552-34) provides a user-accessible 5 foot (1.5 meter) network Ethernet cable in a retractable spool that mounts into the HydraPort base assembly (FIG. 1). Cat 6 cable features more stringent specifications for crosstalk and system noise, plus performance of up to 250 MHz (suitable for 10/100/1000Base-T/TX and 10GBase-T).

- Retractable 5 foot (1.5 meter) Ethernet cable
- Cable Retract Push Button
- Mounting notches (both sides)
- Slide-hook and catch secures mounting collar to cartridge
- Pull trigger to initiate separation of the mounting collar from cartridge
- 5 foot cable pigtail (1.5 meter)

FIG. 1 HPX-N102-ETH-R ETHERNET MODULE WITH RETRACTABLE CABLE

Installation

Warning! - Do not attempt to open the retractable cable module enclosure. There are no serviceable parts inside the module.

- Opening the module enclosure may result in an uncontrolled release of spring forces which could cause serious injury and/or equipment damage.
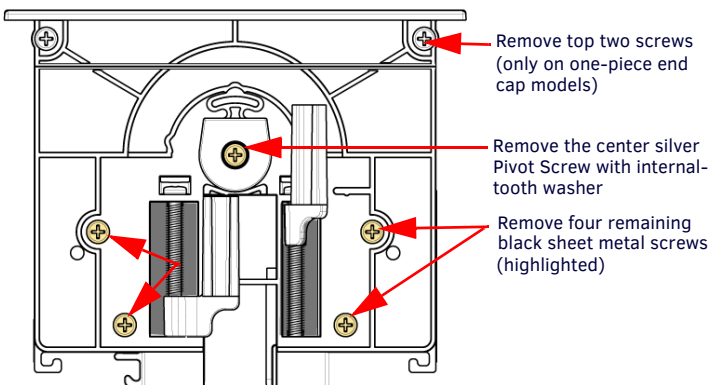
- Opening the module enclosure will void the product warranty.

Warning! - installation of the Hydraport in the table should ensure the pull-out length of the cable can reach all potential users of connectivity, as excessively pulling on a fully extended cable can irreparably damage the retractor module.

Caution: Only use a hand-held #2 Phillips-head screwdriver for mounting this unit. Over-tightening the screws can hinder performance or damage the unit.

For existing HPX installations, the HPX base must be removed from the mounting surface. See "Existing Installations" on page 2. for HPX Base removal instructions.

1. Remove the (silver) pivot screw in the center of the End Cap (FIG. 2). There is an internal tooth washer underneath it. Keep them together for re-installation.
2. Remove the four (black) sheet metal screws that secure the two-piece End Cap to the HPX assembly (additional top two screws only on one-piece end cap models).

- Remove top two screws (only on one-piece end cap models)
- Remove the center silver Pivot Screw with internal-tooth washer
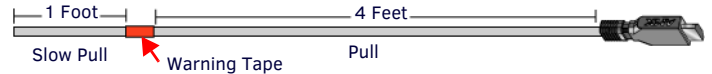- Remove four remaining black sheet metal screws (highlighted)

FIG. 2 HPX BASE ASSEMBLY - MOUNTING/PIVOT SCREW LOCATIONS

3. Gently slide the End Cap out of the HPX base assembly.

The HPX-N102-ETH-R RCM cable cartridge mounts from underneath the table to simplify installation and upgrade of retractable cable modules. This version RCM has a detachable mounting collar that is installed into the Hydraport base first and then the cable cartridge is reattached to the mounting collar after table mounting the base.
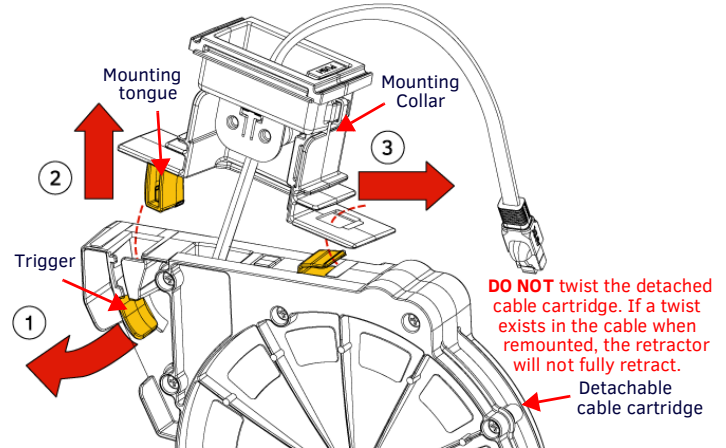
Securely holding the HPX-N102-ETH-R RCM, extract enough cable to lay the cable cartridge on the floor while installing the mounting collar into the HPX Base Assembly (~3ft). When extracting 5 foot (1.5m) cable from the RCM, follow these simple steps:

4. Pull up to 1.5 meters of cable straight up out of the RCM and then lay it down.
5. Watch for a red tape on the cable when pulling out. It is a warning to slow pull for the last 1 foot to avoid damage to the RCM.
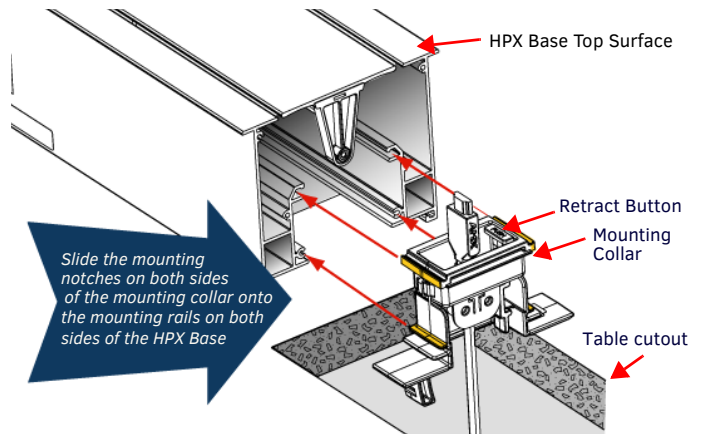

1 Foot — Slow Pull / Warning Tape / 4 Feet — Pull

FIG. 3 EXTRACTING CABLE - WARNING TAPE

6. Pull the cable cartridge trigger (FIG. 4) to release the mounting collar tongue.

- Mounting tongue
- Mounting Collar
- Trigger
- **DO NOT** twist the detached cable cartridge. If a twist exists in the cable when remounted, the retractor will not fully retract.
- Detachable cable cartridge

FIG. 4 HPX-N102-ETH-R MOUNTING COLLAR REMOVAL

7. Lift the mounting collar away from the cable cartridge until the tongue is clear and then slide to the side to clear the hook.
8. Feed the mounting collar up through the table cutout to reach the HPX base assembly (FIG. 5). Align the mounting notches on the mounting collar with the mounting rails on the HPX Base Assembly.

Note: *Module mounting collars are notched in a "tongue and groove" type fashion to ensure that all modules are oriented correctly in the HPX. Note the orientation of the notched mounting collar on each module before sliding the module(s) into the HPX assembly. On RCMs, ensure the retract buttons are all on the same side.*

- HPX Base Top Surface
- Slide the mounting notches on both sides of the mounting collar onto the mounting rails on both sides of the HPX Base
- Retract Button
- Mounting Collar
- Table cutout

FIG. 5 RETRACTABLE CABLE MODULE - MOUNTING INTO AN HPX BASE ASSEMBLY

9. Slide the mounting collar into position.
10. Install any remaining module mounting collars into the HPX base.

Re-Install the End-Cap

Caution: Do not use a high-powered torque screw driver. Over-tightening these screws can damage the product.

1. Align the Mounting Notches on the End Cap with the Mounting Rails on the HPX base.
2. Slide the End Cap into the HPX base until it is fully inserted against the end of the base assembly. Watch out for the tension spring under the pivot pawl popping the pivot pawl off the end cap while pressing against the lid pivot point.
3. Secure the End Cap with the 4 to 6 (black) sheet metal screws (FIG. 2).
4. Replace the (silver) pivot screw and washer in the center of the End Cap.

Mount the HPX into the Mounting Surface

Caution: Do not use a high-powered torque screw driver. Over-tightening these screws can damage the product.

Note: *For detailed instructions on installing the HPX base assembly, refer to the HPX-600/900/1200 and HydraPort Touch (7"/10") Installation Guides (available online at www.amx.com).*

1. Carefully insert the HPX base into the cutout in the mounting surface.
2. Tighten the four mounting screws (FIG. 7) located inside and at each end of the HPX base assembly, to rotate the retaining tabs (FIG. 8) into locking position under the mounting surface.
3. *Minding the twist in the cable*, feed the excess cable up through the mounting collar and insert the cable cartridge hook into the mounting collar cutout.

   Note: *If a twist in the cable occurs from rotating the cassette before insertion, the cable will bind and will not fully retract.*
4. Push the cable cartridge trigger up onto the mounting collar tongue until it latches (opposite of FIG. 4).
5. Use the Push button to retract the cable into the cartridge.
6. Attach the display ends of the cables as necessary.
7. Use cable ties to secure cable bundles as necessary.

Mounting Dimensions

FIG. 6 provides dimensions for the retractable cable module, when installed in an HydraPort base assembly:
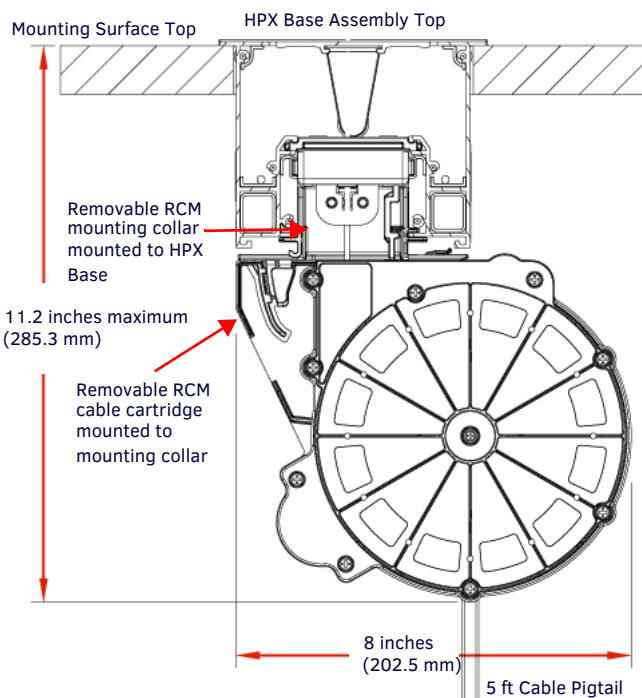

FIG. 6 RCM MODULE (INSTALLED IN AN HYDRAPORT BASE) - DETAILED DIMENSIONS

Existing Installations

For existing HPX installations, the HPX Base Assembly must be removed from the table surface before the Retractable Cable Modules can be installed.

Note: *It may be necessary to reorient existing square drum 1st generation RCMs in the chassis to ensure they fit against the non lip edge of round drum 2nd generation RCMs. Otherwise a 1/2 M blank panel (FG558-01) or other non retract*

1. Cut/remove any cable ties that restrict the removal of the HPX Base Assembly.
2. Loosen the four mounting screws located inside and at each end of the HPX base assembly (FIG. 7), in order to rotate the retaining tabs from under the mounting surface.

   Note: *When the cover of the HPX base is open, only two of these screws are visible. To access the other two screws, tip the cover over to the opposite open position.*
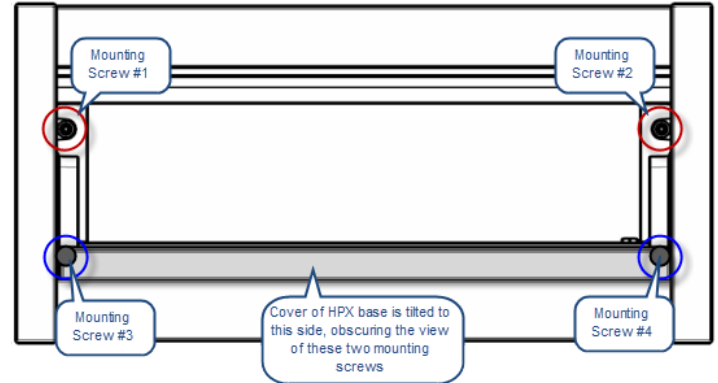

FIG. 7 HPX BASE ASSEMBLY (SHOWN MOUNTED) - MOUNTING SCREWS LOCATIONS

3. Once the retaining tabs have been rotated out from under the mounting surface, the HPX assembly can be lifted away from the mounting surface.

   FIG. 8 provides a cutaway view of the End Cap, showing the retaining tabs highlighted in both the loose position and the tightened (secure) position.
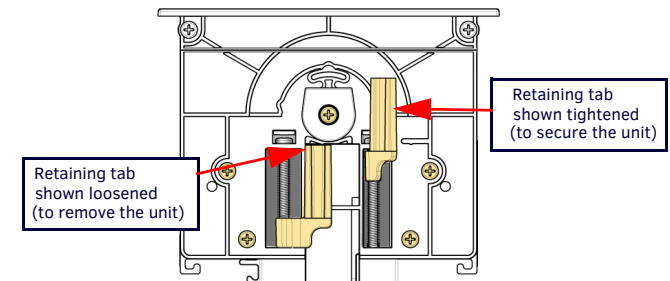

FIG. 8 HPX BASE ASSEMBLY (SHOWN MOUNTED) - MOUNTING SCREWS LOCATIONS

able cable modules need to be installed between the 1st and 2nd Generation RCMs.

4. Return to the installation section at the bottom left column of page 1 to continue with installing the RCM into the HPX Base assembly.

Replacing MyTurn-Ready RCMs

Removal of the HPX Base assembly is not required to replace this RCM:

1. Detach the cable cartridge from the mounting collar using the trigger and slide method described in FIG. 4.
2. From the top of the mounting collar, press a small flat blade screwdriver into the notch on the split side of the pop out panel and pop it out of place (FIG. 9).
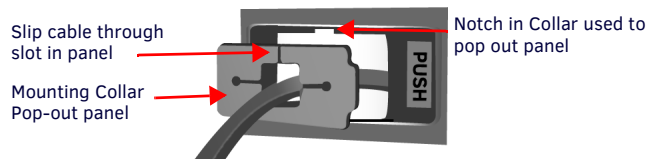

FIG. 9 RCM MOUNTING COLLAR POP-OUT PANEL

3. Slip the cable out through the mounting collar panel.
4. Replace with new RCM in reverse order ensuring the cable is not twisted and the pop out panel split is oriented towards the notch in the collar.

Additional Documentation

Refer to the *Products > Architectural Connectivity* catalog page on **www.amx.com** (*Dealer Site*) for additional product documentation.