

### **Overview**

#### AMX offers three specialized keypad overlays for the Mio Modero<sup>®</sup> R-series remotes:

MIO MODERO R-SERIES REMOTE KEYPAD OVERLAYS		
MIO-R4-KP-TRANSPORT	(FG148-145)	Standard keypad with hard button transport keys (Mio R-4).
MIO-R4-KP-EURO	(FG148-146)	European keypad with Teletext buttons and LAST button (Mio R-4).
MIO-RX-KP-EURO	(FG148-147)	European keypad with transport keys (Mio R-1/2/3)

FIG. 1 shows closeups of each of the three R-Series remote keypad overlays:





FG148-146 Mio Modero R-4 European keypad with Teletext controls FG148-147 Mio Modero R-1/2/3 European keypad with TeleText

controls

FIG. 1 MIO MODERO R-SERIES REMOTE KEYPAD OVERLAYS

# **Specifications**

with transport

controls

The specifications for each of the keypad overlays is as follows:

## **KEYPAD OVERLAY SPECIFICATIONS**

Dimensions (HWD):	<ul> <li>MIO-R4-KP-TRANSPORT: 4 7/8" x 1 13/16" x 1/4" (12.38 cm x 4.60 cm x 0.63 cm)</li> <li>MIO-R4-KP-EURO: 8 1/4" x 1 13/16" x 1/4" (20.96 cm x 4.60 cm x 0.63 cm)</li> <li>MIO-RX-KP-EURO: 4 7/8" x 1 13/16" x 1/4" (12.38 cm x 4.60 cm x 0.63 cm)</li> </ul>		
Weight:	<ul> <li>MIO-R4-KP-TRANSPORT: 0.05 lbs (22.68 g)</li> <li>MIO-R4-KP-EURO: 0.05 lbs (22.68 g)</li> <li>MIO-RX-KP-EURO: 0.05 lbs (22.68 g)</li> </ul>		
Other AMX Equipment:	<ul> <li>Mio Modero R-1 (FG147)</li> <li>Mio Modero R-2 (FG147-418)</li> <li>Mio Modero R-3 (FG148-03)</li> <li>Mio Modero R-4 (FG148-04)</li> <li>CC-USB Programming cable USB to mini USB (FG10-5965)</li> <li>Programming Cable - 3 wire, 2.5 mm stereo jack (FG10-817)</li> </ul>		

The *MIO-R4-KP-TRANSPORT* keypad overlay (**FG148-145**) features hard button keys that provide easy access to commonly used controls, including play, fast forward/ reverse, skip, pause, stop and record.

The *MIO-R4-KP-EURO* keypad overlay (**FG148-146**) features red, yellow, green and blue hard button keys that provide control of European set top boxes from a Mio R-4 remote. This keypad also replaces the LAST button in the Teletext array with a SHIFT button. The *MIO-RX-KP-EURO* keypad overlay (**FG148-147**) features red, yellow, green and blue hard button keys that provide control of European set top boxes from a Mio R-1, R-2 or R-3 remote. This keypad also replaces the LAST button in the Teletext Array with a SHIFT button, which allows changes to the IR codes being used by the remote.

The most significant change to the keypad function involves the use of the arrow keys for adding or changing alphanumeric information such as passwords with the MIO-RX-KP-EURO keypad. For instance, when entering a password in the Mio R-4's Password Confirmation page, instead of using the number keys as on a standard keypad, use the UP and DOWN keys to select the letter or number for each password field and the LEFT and RIGHT keys to move the cursor between fields.

Note: As always, press the Done button on the Password Confirmation page to enter the password. Do not attempt to use the keypad keys to enter the password.

#### Keypad installation for the Mio R-4

To install a new keypad for a Mio R-4 remote device:

- 1. Flip and turn the device so that the buttons are facing away from you and the device is upside down.
- 2. Holding the device in both hands, place your thumbs on the battery door and push up to slide the battery door free.
- 3. Remove the battery.
- 4. Unscrew the 6 screw points on the back (FIG. 2).
- 5. Turn the unit over so the buttons are facing you.
- 6. Lift the top assembly away from the PCB.
- 7. If necessary, push out the standard buttons from the front of the top assembly.
- 8. Place the new keypad in the top assembly and verify the alignment with the guide posts on the PCB.
- 9. Place the top assembly back down on the PCB and turn the unit over again, exposing the 6 screw points.
- 10. Tighten the 6 screw points.
- 11. Install the battery, replace the battery door, and slide the door to lock it in place.



FIG. 2 MIO R-4 SCREW POINTS AND USB PROGRAMMING JACK

#### **Updating Mio R-4 Firmware**

At this time, Mio R-4 firmware updates are only available via USB connection to the Virtual NetLinx Master.

The Mio R-4 firmware must be updated in order to utilize the new functions on the new keypad.

- To update the main firmware for the Mio R-4:
- 1. Connect the Mio R-4 to your computer via the USB programming jack (FIG. 2).
- 2. Open NetLinx Studio.
- 3. Connect to the Virtual NetLinx Master.
- 4. Select Tools > Firmware Transfer.
- 5. Choose the firmware file to be transferred.
- 6. Enter the Mio R-4's Device ID.
- 7. Select Send.

The unit reboots after the upgrade and enters un-archiving mode, during which the AMX logo is displayed and the POWER LED continuously flashes. The unit reboots again after un-archiving with the new firmware running.

For more information on updating firmware on the Mio R-4, please refer to the *Mio Modero R-4 Operation/Reference Manual*, available at **www.amx.com**.

# Keypad installation for the Mio R-1/2/3

To install a new keypad for a Mio R-1/2/3 remote device:

Note: When using the MIO-RX-KP-EURO keypad, the remote will support only five devices instead of six.

- 1. Flip and turn the remote so that the buttons are facing away from you and the device is upside down.
- 2. Holding the device in both hands, place your thumbs on the battery door and push up to slide the battery door free. The battery door will slide in the direction of the bottom end of the device.
- 3. Unscrew the 6 screw points (FIG. 2).
- 4. Turn the unit over so that the buttons are facing you.
- 5. Lift the top assembly away from the PCB.
- 6. If necessary, push out the standard buttons from the front of the top assembly.
- 7. Drop on your custom button pad and verify the alignment with the guide posts on the PCB.
- 8. Place the top assembly back down on the PCB and return the unit over, exposing the 6 screw points.
- 9. Tighten the 6 screw points.
- 10. Replace the battery door, and slide the door upwards to lock it in place.

## Updating Mio R-1/2/3 Firmware

The programming jack at the end of the Mio R-1/2/3 remote is used for communication between the device and KeypadBuilder. The programming jack uses a three-wire, 2.5mm stereo jack, and you may order the programming cable (**FG10-817**) from AMX if you do not currently possess one. The Mio R-1/2/3 communicate at a 115200 baud rate.

To download KeypadBuilder Configuration Files:

- 1. Set the device *Download* mode to ON.
- 2. Flip and turn the device so that the buttons are facing away from you and the device is upside down.
- 3. Holding the device in both hands, place your thumbs on the battery door and slide the battery door free. The battery door will slide in the direction of the bottom end of the device.
- 4. Connect the 2.5mm stereo plug (male) end of the programming cable into the programming jack on the bottom side of the remote device.
- 5. If necessary, connect the DB-9 end of the programming cable to the female DB-9 connector on the DB-9 extension cable (**FG10-727**).
- 6. Connect the female DB-9 terminal end of the extension cable to the port on the back of your computer.
- 7. Configure the communication parameters in KeypadBuilder.



FIG. 3 CONNECTING A MIO MODERO R-3 TO A PC

Updating firmware for the Mio R-1/2/3 is also done through the programming jack. To update the main firmware for the device:

- 1. Connect the device to your computer via the programming jack (FIG. 3).
- 2. Put the device into *Download* mode.
- 3. Open NetLinx Studio.
- 4. Set the Master Communication Settings to Axcess Master and set the baud rate to 115200.
- 5. Go to **Tools > Firmware Transfers > Send to Axcess Device...** This opens the *Send to Axcess* dialog window.

For more information on updating firmware for the Mio R-1/2/3, please refer to the appropriate *Operation/Reference Manual* for the particular Mio Modero remote, available at **www.amx.com**.

# **Using Teletext Mode**

The Teletext mode for the Mio Modero R-3 is a mode primarily intended for European users, where the four buttons surrounding the circular touch pad take on special meanings to Teletext-aware audiovisual equipment.

In order to accomplish this, placing the remote in Teletext mode will make those buttons always emit the codes that they would emit for the AUX device when not in Teletext mode.

Because of this, AUX mode is not available through the remote when in Teletext mode. When the remote is in Teletext mode, the AUX button may be programmed as a fourth macro key.

To switch the Mio Modero R-3 into or out of Teletext mode:

- 1. Press the Input button. The display will read "TELETEXT ON" or "TELETEXT OFF".
- 2. Press the **Input** button again to switch the current Teletext setting on the device.
- 3. Press Enter to save the setting.



© 2015 Harman. All rights reserved. AMX, AV FOR AN IT WORLD, and HARMAN, and their respective logos are registered trademarks of HARMAN. Oracle, Java and any other company or brand name referenced may be trademarks/registered trademarks of their respective companies. AMX does not assume responsibility for errors or omissions. AMX also reserves the right to alter specifications without prior notice at any time.

93-0148-10 REV: D



The AMX Warranty and Return Policy and related documents can be viewed/downloaded at www.amx.com. 3000 RESEARCH DRIVE, RICHARDSON, TX 75082 AMX.com | 800.222.0193 | 469.624.8000 | +1.469.624.7400 | fax 469.624.7153 AMX (UK) LTD, AMX by HARMAN - Unit C, Auster Road, Clifton Moor, York, Y030 4GD United Kingdom • +44 1904-343-100 • www.amx.com/eu/