1	Two-Way ZigBee Wireless Remotes	176 – <i>1</i>	177
٦	Two-Way RF Remotes	178 – '	179
(	One–Wav IR Remotes	180 – <sup>-</sup>	181

# REMOTES

# CONTROL IN THE PALM OF YOUR HAND

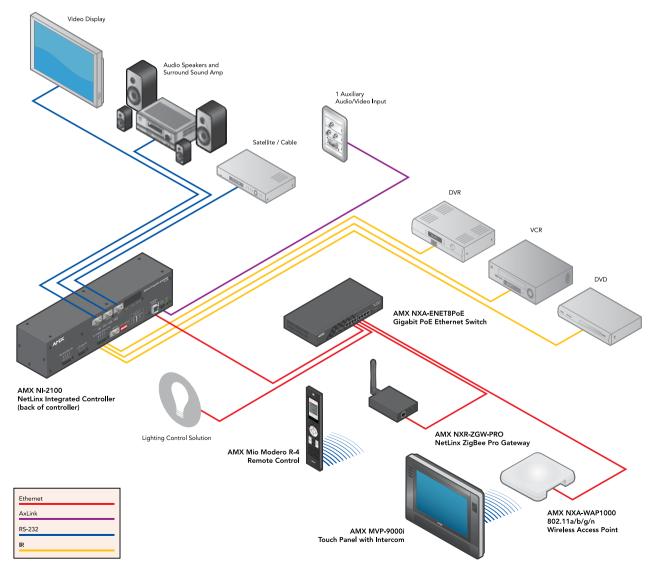
# Handheld Control of Devices and Systems in a Room or Across a Campus

Mio Modero remotes provide stylish wireless freedom to control systems from anywhere in a home or office. These remote controls include models with touch screens and support either one way (IR) or two way (Zigbee Pro) control. Users can roam throughout a home or office and use multiple remotes at a time – even controlling functions in other rooms. Unleash the user's imagination - let them control lighting, shades, pool/spa and HVAC in addition to standard audio and video functions – with these elegant, flexible, and easy to use remote controls.

#### SYSTEM DIAGRAM

The R-4 and the Mio Modero Remote Controls give users convenient, handheld control of devices in multiple rooms and

the ability to roam from room to room when using a NetLinx ZigBee Pro Gateway.





#### Get to Know the R-Series

The One + One R-4 R-Series
Remotes Brochure gives an in-depth
overview of the capabilities and
applications of the Mio Modero
R-Series Remote Controls. Also
included are several product photos
and a Remote Controls Comparison
Chart. Just visit www.amx.com/
newsroom/literature.asp to
download the latest literature.



# R-4 Actual Size Product Card Actual sized product cards of the Mio Modero R-4 and other AMX products are available for download in the AMX.com literature section located at: www.amx.com/newsroom/

literature.asp. In addition, a list of product features is included.

# Mio Modero® R-Series Remote Controls

#### REMOTE CONTROL COMPARISON CHART

	R-1	R-2	R-4
SIGNAL TRANSMISSION TYPE	IR	IR/418 MHz & 433 MHz RF	2.4 GHz ZigBee Pro
NUMBER OF REMOTES ALLOWED WITHIN SAME AREA	Multiple <sup>1</sup>	2 per area (radius of 100 ft)	8
SIGNAL TRANSMISSION CAPABILITY	One-Way	One-Way	Two-Way
INDOOR SIGNAL TRANSMISSION RANGE <sup>3</sup>	Line of Sight	100 feet	100 feet (extendable with Repeaters)
LCD DISPLAY	One Blue text line	One Blue text line	2.4"/16-bit color Active Touch Scrolling text Dynamic lists
NUMBER OF CONTROLLABLE DEVICES	6	6	Unlimited
RECHARGABLE LITHIUM-ION BATTERIES	Optional	Optional	Standard
EUROPEAN OVERLAY W/ SKY TV CAPABILITY	Teletext w/ Numeric	Teletext w/ Numeric	Teletext w/ Transports
AVERAGE USE TIME BETWEEN CHARGES	4 weeks	4 weeks	1 week
CHARGING CRADLE COMPATIBLE	Optional <sup>2</sup>	Optional <sup>2</sup>	Standard

<sup>1 -</sup> All use the same IR codes



<sup>2 -</sup> Requires optional rechargeable battery pack

<sup>3 -</sup> Varies depending on environmental conditions

## Mio Modero® R-4 Remote

MIO-R4 Remote Only (FG148-04)

MIO-R4-CC Remote with Charging Cradle (FG148-14K)

MIO-R4-ZGW Remote with Charging Cradle

> and ZigBee Pro Gateway (FG148-25K)













#### OVERVIEW

The Mio Modero® R-4 remote provides custom control features and includes a 2.4-inch full-color, active-matrix TFT LCD Touch Panel, ZigBee Pro wireless technology, two-way communication and unlimited control of devices - all in an elegant handheld rechargeable device. It has a wide coverage area and signals can be transmitted through walls, ceilings, etc. with a range of up to 100 feet indoors (dependent upon conditions and construction materials). The coverage area can be extended by using NetLinx ZigBee Pro Repeaters. And with ZigBee Pro, any number of R-4s can be used within the same property without interfering with each other.

#### COMMON APPLICATION

The Mio Modero R-4 is an excellent choice for two-way LCD touch control of a wide variety of devices throughout residences, hotels or facilities of almost any size.

#### **FEATURES**

- 2.4-inch color active-matrix TFT LCD Touch Panel
- 240 x 320 pixel resolution
- Transmits/Receives two-way signals using ZigBee Pro Wireless technology
- Near unlimited coverage when using NetLinx ZigBee Pro Repeaters
- 29 hard buttons and two LCD buttons
- Supports any connected system device
- Wakes upon touching side rails, moving it, or button presses

#### **SPECIFICATIONS**

#### DIMENSIONS (HWD)

9 1/2" x 2" x 3/4" (24.1 cm x 5.1 cm x 1.9 cm)

- 7.2 oz (20g) without batteries
- 8.8 oz (25 g) with batteries

- Mio Modero Lithium-Ion Rechargeable Battery
- 12-18 VDC Power Supply for recharging battery

#### LCD TOUCH PANEL DISPLAY

- 2.4" color active-matrix TFT (240 x 320 pixel resolution)
- Viewing Angle: ± 60° horizontal, ± 60° vertical
- Display colors: 64K (16-bit color depth)
- Brightness: 100 cd/m2
- Contrast: 350:1

#### PUSHBUTTONS

29 hard buttons, 2 LCD buttons

MEMORY

- 32 MB of FLASH
- 64 MB of SDRAM

#### RF TRANSMISSION

- ZigBee Pro 2.4 GHz, 2-way network communications
- 100 feet indoors (extendable using NetLinx ZigBee Pro Repeaters)

#### **BACKLIGHTING SYSTEM ACTIVATION**

• Touch • Tilt Switch • Push Button • Touch Screen

#### **ENCLOSURE MATERIALS**

- Molded RF Transmissive Material
- Black brushed metal top and bottom cover plates
- Chrome Side Rails, Volume, Channel, Navigation, Select, Play and Power Buttons

#### REAR COMPONENTS

Programming Port
 Battery Door
 Rechargeable Battery Connection

## CUSTOMIZATION

Multiple languages supported for Touch Panel and Engraved Buttons

## SUPPORTED LANGUAGES

Arabic, English, French, German, Hindi, Italian, Simple Chinese, Portuguese, Russian, Spanish, Thai

- Operating Temperature: 0° to 40° C (32° to 104° F)
- Storage Temperature: -20° to 70° C (-4° to 158° F)

#### CERTIFICATIONS

FCC, IC, CE, IEC 60950, Japan Approval

#### OPTIONAL KEYPADS

- MIO-R4-KP-ITALIAN (FG148-141)
- MIO-R4-KP-FRENCH (FG148-142)
- MIO-R4-KP-ARABIC (FG148-143)
- MIO-R4-KP-MANDARIN (FG148-144)

RECOMMENDED ACCESSORIES	DESCRIPTION	PART #	PAGE#
NXR-ZGW-PRO	NetLinx ZigBee Pro Gateway	(FG5791-11)	262
NXR-ZRP-PRO	NetLinx ZigBee Pro Repeater	(FG6791-03)	263
MIO-RCC-KIT	Mio Remote Charging Cradle Kit	(FG147-03K)	264
MIO-RBP	Rechargeable Lithium Ion Battery	(FG147-10)	265
CC-USB	USB Programing Cable	(FG10-5965)	258
MIO-R4-KP-TRANSPORT	Mio R-4 Device Transport Keypad	(FG148-145)	264
MIO-R4-KP-EURO	Mio R-4 European Keypad	(FG148-146)	265







#### TRAINING AVAILABLE

For important installation, configuration and programming techniques, AMX University training is available. Just visit www.amx.com/training



#### AWARD WINNER

The Mio Modero R-4 was awarded the "2007 EXC!TE Award" from CustomRetailer, "Product of the Year" from EH Publishing and the "Technology InAVation Award, Most InAVative Control Product for Residential Use" from InAVate.



#### D-TOOLS CERTIFIED PRODUCT

This product can be found in the D-Tools manufacturer product database and specified as a third party device when building and proposing a system using D-Tools System Integrator software.



#### COUNTRY OF ORIGIN: MEXICO

To satisfy the requirements/regulations of existing or future government programs, this two-letter code is being provided to designate the country of origin for this product.

# Mio Modero R-2 Remote

MIO-R2-418 418 MHz (FG147-418) MIO-R2-433 433 MHz (FG147-433K)













#### OVERVIEW

The Mio Modero R-2 is an elegant handheld remote providing RF or IR control. Features a range of up to 100 feet indoors (dependent upon conditions and construction materials) using either 418 MHz (MIO-R2-418) or 433 MHz (MIO-R2-433) one-way RF for greater coverage and flexible control. Provides custom control features, contained in an elegant handheld device including 45 backlit laser-engraved buttons: 3 are designated to activate macros, 6 are slated for accessing devices and the remaining 36 represent specific operating functions for each device.

#### COMMON APPLICATION

Perfect for residential or commercial applications requiring one-way RF control or direct line-of-sight IR control of a specific number of integrated devices.

#### **FEATURES**

- Transmits one-way signals using 418 MHz or 433 MHz RF signal transmission
- 45 push buttons
- Also operates at 38 kHz/455 kHz IR Frequencies
- Supports 6 Devices and 3 Macros
- Wakes upon touching side rails, moving it, or button presses

#### **SPECIFICATIONS**

#### DIMENSIONS (HWD)

9 1/2" x 2" x 3/4" (24.1 cm x 5.1 cm x 1.9 cm)

• 7.2 oz (20 g) without batteries • 8.8 oz (25 g) with batteries

#### LCD DISPLAY

• Animated IR/RF Transmission Icon • Battery Indicator Icon

4 AAA Alkaline Batteries (5 hours battery life)

#### TRANSMISSION FREQUENCIES

• IR 38 KHz

• IR 455 KHz

• 418 MHz RF (1-way) (FG147-418)

• 433 MHz RF (1-way) (FG147-433)

• Capable of simultaneous IR and RF transmissions

## TRANSMISSION RANGE (DISTANCE) WITH MIO IR RECEIVER

• 100 feet at 38 KHz

• 50 feet at 455 KHz

• 300 feet at 418 MHz (RF)

• 200 feet at 433 MHz (RF)

#### TRANSMISSION RANGE (ANGLE)

- 140 degrees (±70° from perpendicular) horizontally from an axis extending from the end of the remote.
- 40 degrees (±20° from perpendicular) vertically from an axis extending from the end of the remote.

#### TOP COMPONENTS

- LED blue backlit buttons indicate device is awake
- Display (OLED) 128 x 32 pixels, active area is 29.42 mm x 7.98 mm
- Pushbuttons the power button is red backlit; the rest are blue backlit buttons. 45 buttons; 9 custom buttons (3 macro and 6 device).

#### REAR COMPONENTS

- Programming Port 2.5 mm stereo female conductor jack
- Battery Door
- Rechargeable Battery Connection

#### BACKLIGHTING SYSTEM ACTIVATION

• Touch • Tilt Switch • Push Button

#### **ENCLOSURE MATERIALS**

- Molded IR Transmissive Material
- Black Brushed Metal top and bottom cover plates
- Chrome Side Rails, Volume, Channel, Navigation, Select, Play and Power Buttons

Multiple Languages for LCD Display and Engraved Buttons (Top 9 Buttons, 3 Macro/6 Device)

## SUPPORTED LANGUAGES

Arabic, English, French, German, Hindi, Italian, Simple Chinese, Portuguese, Russian, Spanish, Thai

#### ENVIRONMENTAL

- Operating Temperature: 0° to 50° C (32° to 122° F)
- Storage Temperature: -10° to 70° C (14° to 158° F)

#### OPTIONAL KEYPADS

MIO-RX-KP-EURO (FG148-147)

RECOMMENDED ACCESSORIES	DESCRIPTION	PART #	PAGE#
MIO-RCC-KIT	Mio Remote Charging Cradle Kit	(FG147-03K)	264
MIO-RBP	Rechargeable Lithium-Ion Battery	(FG147-10)	265
MIO-IRRX	Mio Modero IR Receiver	(FG5797-01xx)	267
IRX-PP38	Plasma Proof IR Sensor	(FG460)	266
AXR-RF	418 MHZ RF Receiver	(FG782-418)	268
AXR-RF	433 MHZ RF Receiver	(FG782-433)	268
MIO-R1-EN	Custom engraving	(FG147-01)	
MIO-RX-KP-EURO	Mio R1/2/3 European Keypad	(FG148-147)	265







#### TRAINING AVAILABLE

For important installation, configuration and programming techniques, AMX University training is available. Just visit www.amx.com/training



#### AWARD WINNER

The Mio Modero R-2 was awarded the "High Impact Product of the Year" from  $\it CE\ Pro$ .



#### D-TOOLS CERTIFIED PRODUCT

This product can be found in the D-Tools manufacturer product database and specified as a third party device when building and proposing a system using D-Tools System Integrator software.



#### COUNTRY OF ORIGIN: MEXICO

To satisfy the requirements/regulations of existing or future government programs, this two-letter code is being provided to designate the country of origin for this product.

## Mio Modero R-1 Remote

(FG147)













#### OVERVIEW

The Mio Modero R-1 provides custom control features, contained in an elegant handheld device. Includes 45 backlit laser-engraved buttons: 3 are designated to activate macros, 6 are slated for accessing devices and the remaining 36 represent specific operating functions for each device. Also includes circular chrome navigation button for up, down, left, right and select as well as two square chrome buttons for changing channels and adjusting volume.

#### COMMON APPLICATION

Smaller rooms where IR control of a specific number of integrated devices is required.

#### **FEATURES**

- 45 push buttons
- Operates at 38 kHz/455 kHz IR Frequencies
- Supports 6 Devices and 3 Macros
- Wakes upon touching side rails, moving it, or button presses

#### **SPECIFICATIONS**

#### DIMENSIONS (HWD)

9 1/2" x 2" x 3/4" (24.1 cm x 5.1 cm x 1.9 cm)

- 7.2 oz (20 g) without batteries
- 8.8 oz (25 g) with batteries

4 AAA Alkaline Batteries (5 hours battery life)

#### LCD DISPLAY

- Animated IR Transmission Icon
- Battery Indicator Icon

#### TRANSMISSION FREQUENCIES

- IR 38 kHz
- IR 455 kHz

## TRANSMISSION RANGE (DISTANCE) WITH MIO IR RECEIVER

- 100 feet at 38 kHz
- 50 feet at 455 kHz

#### TRANSMISSION RANGE (ANGLE)

- 140 degrees (±70° from perpendicular) horizontally from an axis extending from the end of the remote.
- 40 degrees (±20° from perpendicular) vertically from an axis extending from the end of the remote.

#### TOP COMPONENTS

- LED blue backlit buttons indicate device is awake
- Display (OLED) 128 x 32 pixels, active area is 29.42 mm x 7.98 mm
- Pushbuttons the power button is red backlit; the rest are blue backlit buttons. 45 buttons; 9 custom buttons (3 macro and 6 device).

#### **BACKLIGHTING SYSTEM ACTIVATION**

• Touch • Tilt Switch • Push Button

## ENCLOSURE MATERIALS

- Molded IR Transmissive Material
- Black Brushed Metal top and bottom cover plates
- Chrome Side Rails, Volume, Channel, Navigation, Select, Play and Power Buttons

- Programming Port 2.5 mm stereo female conductor jack
- Battery Door

## CUSTOMIZATION

Multiple Languages for LCD Display and Engraved Buttons (Top 9 Buttons, 3 Macro/6 Device)

## SUPPORTED LANGUAGES

Arabic, English, French, German, Hindi, Italian, Simple Chinese, Portuguese, Russian, Spanish, Thai

#### ENVIRONMENTAL

- Operating Temperature: 0° to 50° C (32° to 122° F)
- Storage Temperature: -10° to 70° C (14° to 158° F)

RECOMMENDED ACCESSORIES	DESCRIPTION	PART #	ONLINE		PAGE#
MIO-RCC-KIT	Mio Remote Charging Cradle Kit			(FG147-03K)	264
MIO-RBP	Rechargeable Lithium Ion Battery			(FG147-10)	265
MIO-IRRX	Mio Modero IR Receiver			(FG5797-01xx)	267
IRX-PP38	Plasma Proof IR Sensor			(FG460)	266
MIO-R1-EN	Custom engraving			(FG147-01)	
MIO-RX-KP-EURO	Mio R1/2/3 European Keypad			(FG148-147)	265







#### TRAINING AVAILABLE

For important installation, configuration and programming techniques, AMX University training is available. Just visit www.amx.com/training



#### AWARD WINNER

The Mio Modero R-1 was awarded the "High Impact Product of the Year" from  $\it CE\ Pro$ .



#### D-TOOLS CERTIFIED PRODUCT

This product can be found in the D-Tools manufacturer product database and specified as a third party device when building and proposing a system using D-Tools System Integrator software.



#### COUNTRY OF ORIGIN: MEXICO

To satisfy the requirements/regulations of existing or future government programs, this two-letter code is being provided to designate the country of origin for this product.



