

RS-232 Remote – Utilizing Read Switches

APPLICABLE DEVICES

RS-232 REMOTE TRANSMITTER (MC-REM-RS232)

Contents

1. Utilizing Read Switches with the RS-232 Remote	1
1a. Setting up the RS-232 Remote Read Switch Port	2
4. Parsing Data on the RS-232 Remote.....	Error! Bookmark not defined.

1. Utilizing Read Switches with the RS-232 Remote

MicroRidge offers various read switches, including Hand Switches and Foot Switches, for users to conveniently trigger readings.

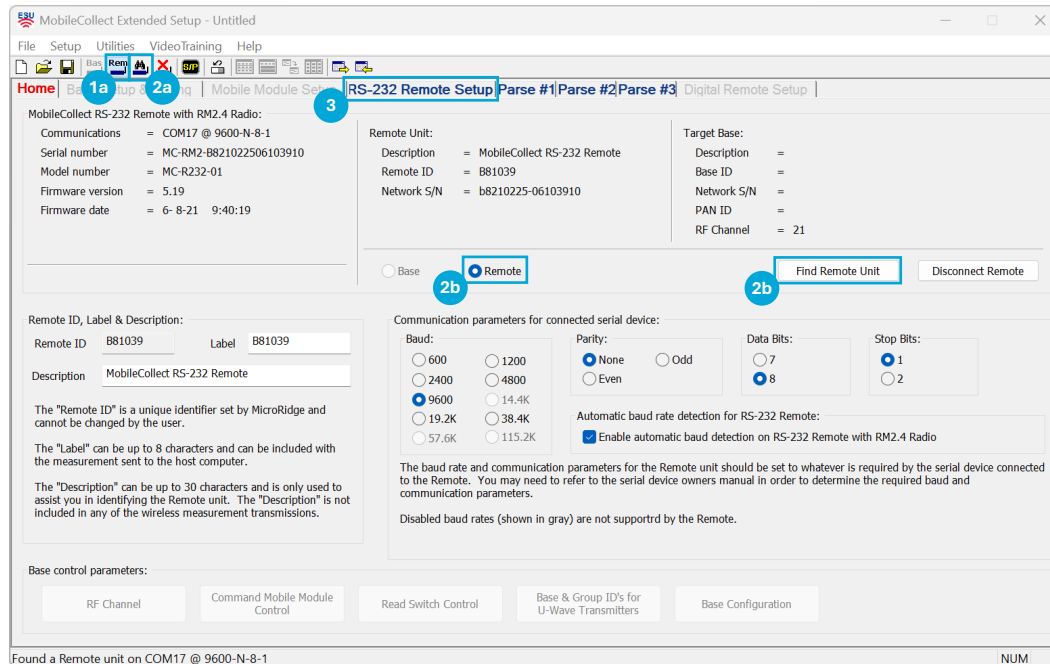
With the MobileCollect system, a read switch can be used with both the Remote and the Base. This leads to the ultimate in configurability and thus user ergonomics. Keep in mind that in some cases both Bases and Remotes can be used with read switches simultaneously.

In addition to onboard print buttons, many devices have serial commands that can be sent to the RS-232 port to request a reading. Other devices continually output a stream of data or require a hardware handshake signal to request a reading. The RS-232 Remote read switch port can be programmed to capture a reading from all 3 options. Base Receiver read switch ports can be programmed to send a serial command.

Note: These setup steps must be completed after RS-232 Remote Pairing and Initial Setup are completed.

2. Setting up the RS-232 Remote Read Switch Port

1. Connect the RS-232 Remote to the PC via USB. Change the Setup program to look for Remotes.
2. Find the Remote.
3. Navigate to the “RS-232 Remote Setup Tab”



4. Check the “Enable read switch” Option.
5. Select the desired read switch action:
 - 5a. “Serial device sends continously, only accpet read with a read switch press” is used when the RS-232 device is printing a continuous stream of data. This is common with some weigh scales. When this option is selected the RS-232 Remote ignore the outputs until the read swtich is pressed. After the read swtich is pressed, the RS-232 remote captures a single reading to transmit to the Base.
 - 5b. “Set handshake low for XXX msec” is used when the RS-232 device sends data when one of the handshake pins is held low. You can specify the time the RS-232 Remote hold the line low to match the required timing of the RS-232 Device.
 - 5c. “Command String” is used when the RS-232 device has a serial command to print a reading. The serial command should be in the user manual of the RS-232 device. Make sure to include an EOP characters as necessary. In this example the command “#{CR}” is used.
 - i. Note: Any command can be programmed to the read switch. For example an “Zero” or “Tare” Command can be programmed here.
6. The RS-232 Remote has the option to repeat the read swtich command at a user defined rate. The selected read swtich action will be repeated at the defined rate as long as the read switch is pressed.
7. Once the desired read swtich action is defined, send the setup to the RS-232 Remote.

MobileCollect Extended Setup - Untitled

File Setup Utilities VideoTraining Help

Home Base Setup & Pairing Mobile Module **RS-232 Remote Setup** Parse #1 Parse #2 Parse #3 Digital Remote Setup

Target Base Unit:

Description = MobileCollect Wedge/USB Base
Base ID = 794034
PAN ID = 835a
Network S/N = 79250430-11403420
RF Channel = 21

Get Base

Input End-of-Packet Identifier:

☒ Specific character CR 13 \x0d
☐ Gap time 50 msec (50 to 2,000)
☐ Number of characters 1 (1 to 100)

Parsing groups:

☐ Enable parsing group #1 ☐ Enable parsing group #2 ☐ Enable parsing group #3

Instruction:

The Remote tab allows you to define the basic operation of the Remote unit. It is very important you properly define the end-of-packet so that the Remote unit knows when to process and send the incoming data to a Base unit.

A read switch can be connected to the Remote to help control the operation of the connected serial device. Refer to the User's Guide for more details on the read switch operation.

If you need to parse the incoming data, enable 1 or more Parsing tabs and set up the necessary parameters on the tabs.

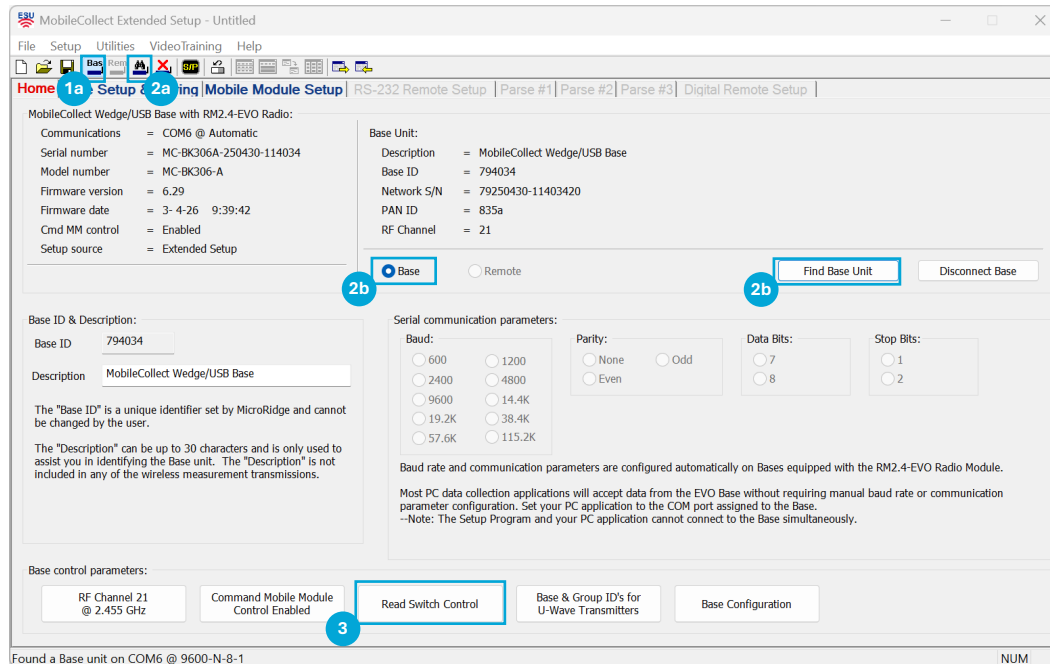
Read switch:

☒ Enable read switch
☐ Serial device sends continuously, only accept reading with a read switch press
☐ Set handshake low for 100 msec (50 to 1,000)
☒ Command string ?(CR)
☒ Repeat command every 5000 msec while read switch is pressed (250 to 60,000)

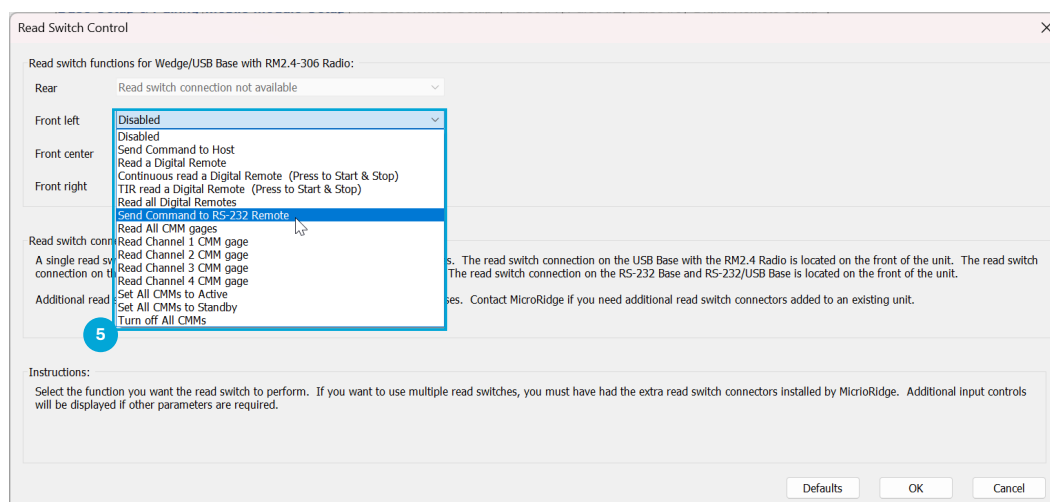
Ready NUM

3. Setting up the Base Receiver Read Switch Port

1. Connect the Base Receiver to the PC via USB. Change the Setup program to look for Bases.
2. Find the Base.
3. Click on the “Read Switch Control” Button

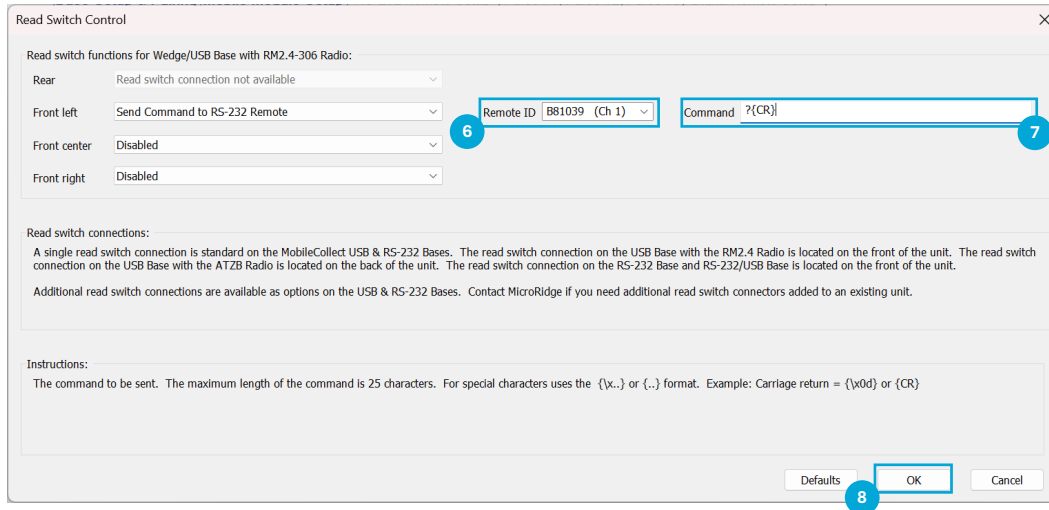


4. The “Read Switch Control” Window will appear with dropdown options for the Base Receiver’s read switch ports. Most full size Base Receivers have 1 front read switch, but the [Wedge Base](#) can be configured with 3 read switch ports.
5. Select “Send Command to RS-232 Remote” in the drop down menu for the “Front left” read switch port



6. Select the desired RS-232 remote in the “Remote ID” drop down list. The drop down menu finds any RS-232 Remotes paired to a channel only.

7. Enter the serial command for the RS-232 device connected to the remote.
8. Press "OK" to confirm the read switch port setup.



Read Switch Control

Read switch functions for Wedge/USB Base with RM2.4-306 Radio:

Rear	Read switch connection not available		
Front left	Send Command to RS-232 Remote	Remote ID: B81039 (Ch 1)	Command: ?{CR}
Front center	Disabled		
Front right	Disabled		

Read switch connections:

A single read switch connection is standard on the MobileCollect USB & RS-232 Bases. The read switch connection on the USB Base with the RM2.4 Radio is located on the front of the unit. The read switch connection on the USB Base with the AT2B Radio is located on the back of the unit. The read switch connection on the RS-232 Base and RS-232/USB Base is located on the front of the unit.

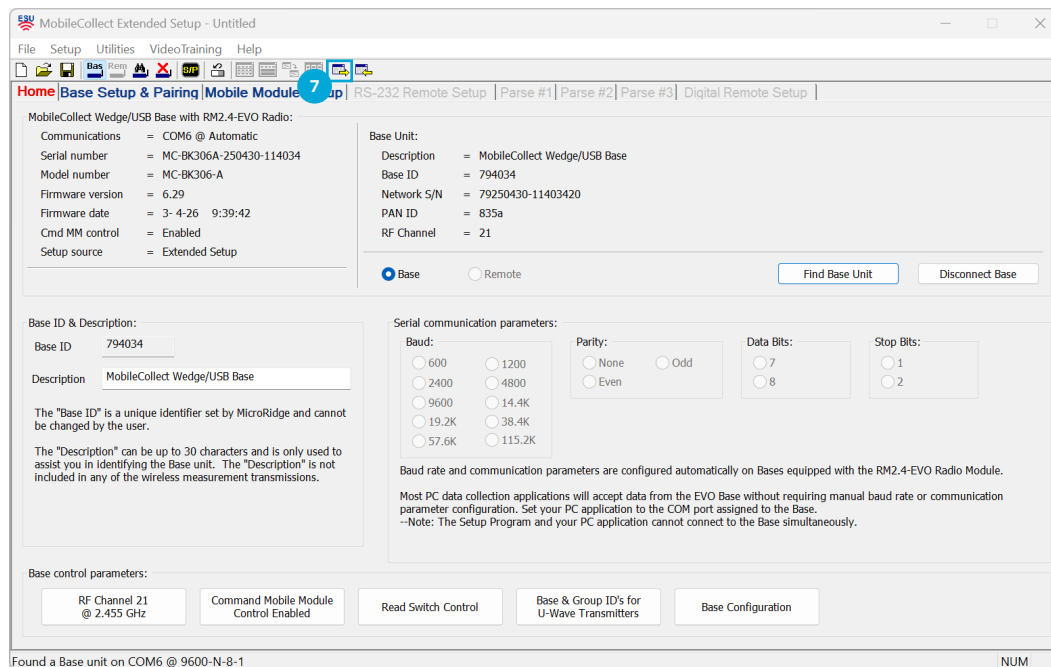
Additional read switch connections are available as options on the USB & RS-232 Bases. Contact MicroRidge if you need additional read switch connectors added to an existing unit.

Instructions:

The command to be sent. The maximum length of the command is 25 characters. For special characters uses the {x..} or {..} format. Example: Carriage return = {x0d} or {CR}

Defaults OK Cancel

9. To finalize the setup, send the update parameters to the Base.



MobileCollect Extended Setup - Untitled

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Home Base Setup & Pairing Mobile Module Setup RS-232 Remote Setup Parse #1 Parse #2 Parse #3 Digital Remote Setup

MobileCollect Wedge/USB Base with RM2.4-EVO Radio:

Communications = COM6 @ Automatic

Serial number = MC-BK306A-250430-114034

Model number = MC-BK306-A

Firmware version = 6.29

Firmware date = 3-4-26 9:39:42

Cmd MM control = Enabled

Setup source = Extended Setup

Base Unit:

Description = MobileCollect Wedge/USB Base

Base ID = 794034

Network S/N = 79250430-11403420

PAN ID = 835a

RF Channel = 21

Base ID & Description:

Base ID: 794034

Description: MobileCollect Wedge/USB Base

The "Base ID" is a unique identifier set by MicroRidge and cannot be changed by the user.

The "Description" can be up to 30 characters and is only used to assist you in identifying the Base unit. The "Description" is not included in any of the wireless measurement transmissions.

Serial communication parameters:

Baud: 600 1200 2400 4800 9600 14.4K 19.2K 38.4K 57.6K 115.2K

Parity: None Odd Even

Data Bits: 7 8

Stop Bits: 1 2

Baud rate and communication parameters are configured automatically on Bases equipped with the RM2.4-EVO Radio Module.

Most PC data collection applications will accept data from the EVO Base without requiring manual baud rate or communication parameter configuration. Set your PC application to the COM port assigned to the Base.

--Note: The Setup Program and your PC application cannot connect to the Base simultaneously.

Base control parameters:

RF Channel 21 @ 2.455 GHz

Command Mobile Module Control Enabled

Read Switch Control

Base & Group ID's for U-Wave Transmitters

Base Configuration

Found a Base unit on COM6 @ 9600-N-8-1

NUM