

HOW TO GUIDE: 3rd Party Communication

This document describes the installation of the RTK format unlock code. This allows the mojoRTK console to receive different correction formats and the mojoRTK base station to generate different correction formats.

Description

By default, the mojoRTK system is limited to using a proprietary RTK information format.

- Unlocking RTK format support on the mojoRTK console enables the console to work with base stations which support CMR or RTCM 3.0
- Unlocking RTK format support on the mojoRTK base station enables the base to generate RTK information in either CMR or RTCM3.0 format

Benefits

The RTK format unlock code enables the mojoRTK system to work with 3rd party bases and consoles.

Limitations

mojoRTK Console Limitations

- The mojoRTK console will only work with a base station which provides RTK information in CMR or RTCM 3.0 format
- GLONASS is not supported and should not be used if the format is CMR and a non-Leica base is being used
- It is recommended that the RTK information should be provided at a rate of 1 Hz
- Third party multiple-base solution is only supported via virtual reference stations

mojoRTK Base Limitations

- The mojoRTK base station will only provide RTK information at a rate of 1 Hz
- The mojoRTK base station will only support Leica proprietary, CMR and RTCM3.0 RTK information formats. GLONASS and CMR should only be enabled if talking to a mojoRTK console

Required Items

- SW Authcodes to unlock RTK information formats
Depending on whether a 3rd party base or console is being used a different unlock code will be required. These are:
 - CMR and RTCM3.0 Output **9200002AG**
 - CMR and RTCM3.0 Input **9200004AG**

Configuration

Installing the RTK formats manually on the mojoRTK base station

1. Switch on the mojoRTK base station
2. Use the up/down buttons to select 'Service' and press OK
3. Use the up/down buttons to select 'Add Features' and press OK
4. Enter the 16 digit code by using the up/down buttons to select the value for a digit and pressing OK or Escape to move between digits
5. After the code has been accepted the base station will restart and the additional RTK formats will be available

Installing the RTK formats manually on the mojoRTK Console

1. Switch on the mojoRTK console
2. Press the OK button to enter the main menu
3. Select Settings -> Extended Features -> Enter New Code
4. Enter the 16 digit code by using the navigation wheel to select the value for a digit and pressing OK or Escape to move between digits
5. After the code has been accepted the console will restart and the additional RTK formats will be available

Installing the RTK formats using Virtual Wrench™ on the mojoRTK console

1. Switch on the mojoRTK console
2. Press softkey 3 twice to bring up the Virtual Wrench™ connection screen
3. Select 'Yes' and press the OK button to connect to Virtual Wrench™
4. Once connected the baseline extension code will be automatically downloaded and installed
5. After the code has been accepted the console will restart and the additional RTK formats will be available

Glossary

CMR	Compact Measurement Record
RTCM	Radio Technical Commission for Maritime Services