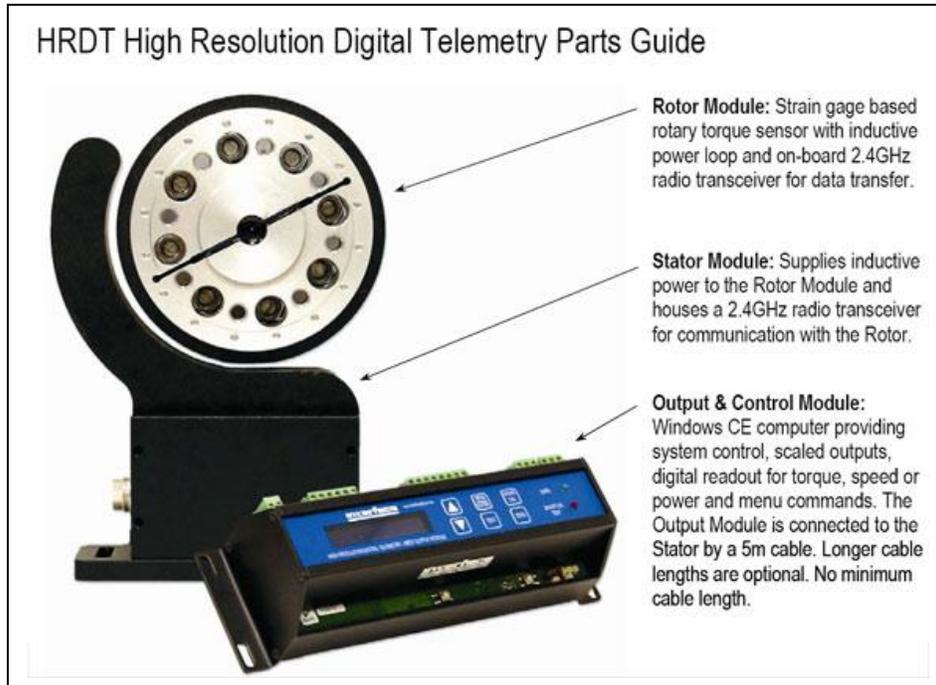


# HRDT QUICK START GUIDE



**NOTES:**

1. The HRDT System arrives in a re-usable box with foam inserts. Please store the box in a safe place for system storage or warranty return.
2. The HRDT Assistant Software is normally NOT required for new system setup.
3. The HRDT System is normally shipped pre-configured and ready to instal
4. The Output, Scaling and Filter Settings can be re-configured using the push-button menu on the Output Module.

A complete HRDT system includes the following items:

Qty	Item	Description
1 ea.	HRDT Rotor	Rotor (torque sensor)
1 ea.	HRDT Stator	Stator
1 ea.	HRDT-OM	Output Module
1 ea.	CT-327-12	12-ft data and power cable for connecting Stator to Output Module
2 ea.	End Plates	Spare end plates for use when DIN Rail mounting
1 ea.	DIN Rail Clip	For DIN Rail mount install End Plates and DIN rail clip
1 ea.	24V Power Supply	Output Module Power supply – Includes AC power cord

1 ea.	Power Cable	Used to connect 24V power supply to Output Module
1 ea.	USB Cable	USB A to B cable for connecting Output Module to Computer
1 ea.	USB Flash Drive	Contains HRDT User Manual, HRDT Assistant Software and Backup Configuration file
1 ea.	Alignment Tool	Silicon rubber strip used for setting the Rotor-to-Stator clearance.
2 ea.	Calibration Certificate	One mV/V Rotor Calibration certificate and one System Calibration Certificate for the entire system

**MECHANICAL INSTALLATION**

1. Mount the rotor to the drive and load sides of the system.
2. Loosely mount the stator, allowing about 2 mm gap between rotor and stator coil. A flexible rubber gap spacer is provided for ease of setup.
3. Connect the stator end of the data/power cable to the Stator connector.
4. Connect the Output Module end of the data/power cable to the Output Module. The USB plug connects to the bottom USB slot on the Output Module labeled ‘USB A” and the 3-pin power connector plugs into the connector labeled “Stator”.
5. Connect the 24V power cable from the power supply to the 2-pin power connection on the Output Module. The AC power cord and the 24V power cable must be wired to the 24V supply. (it is also acceptable to use a customer owned 24V power supply)
6. After applying 24V power to the Output Module the system will boot up and go through its startup routine. This takes about 10 seconds. At the end of start-up the data light should remain ON.
7. Check for proper Rotor-to-Stator alignment and re-align if necessary. The system is correctly aligned only after two conditions are met:
  - a. The DATA light must be ON.
  - b. The SHUNT CAL button must function. To check for SHUNT CAL function, press the SHUNT CAL button until the SHUNT CAL / TEST light turns ON and stays ON. Press and hold the SHUNT CAL button again for a few seconds to turn off.
8. Tighten stator mounting bolts.

9. Re-check Alignment again as in step 7 above.

## **OUTPUT MODULE**

A complete HRDT system includes a factory set-up to the customers requested settings as detailed on the included system setup sheet. The Output Module (OM) push buttons can be used to check or change the system configuration if desired. Please refer to the HRDT Operating Manual for full details.

During system boot-up the OM will display the firmware version number and the output setting. For example, if the output is set for Frequency then the OM will display:

Active O/P Channel  
Frequency 1

## **HRDT ASSISTANT SOFTWARE**

The HRDT Assistant software serves the following functions:

1. Can be used as an alternative method to the Output Module push-buttons for system configuration
2. Managing different configuration files. For example, files can be saved containing different output type, filter and/or scaling settings.
3. Viewing or modifying rotor calibration data.
4. Radio pairing and radio channel changes. Normally the system arrives paired from the factory, but under certain conditions pairing or channel change may be required.
5. Viewing and setting the digital Inputs and Outputs.
6. Viewing or changing the data light settings.
7. Logging data.
8. Diagnostic functions.

## **Installation**

### **WIN XP HRDT Assistant Installation**

1. Microsoft ActiveSync is required. If not already present on system, run "setup ActiveSync.msi from the included USB Flash drive and follow on-screen installation instructions.
2. Run HRDTInstall.exe from the included USB Flash Drive and follow on-screen instructions.

### **WIN Vista/ WIN 7**

1. Microsoft ActiveSync is NOT required.
2. Run HRDTInstall.exe from the included USB Flash Drive and follow on-screen instructions.

#### Connecting the PC to the Output Module

1. Attach supplied USB A to USB B cable between Output Module and PC.
2. The PC will recognize the Output Module as a mobile device under windows.
  - a. WIN XP – ActiveSync must be running, and will attempt to connect to the Output Module. Once connected, the ActiveSync New Partnership window can be cancelled. It is not necessary set up a partnership.
  - b. WIN Vista / 7 – Windows will recognize the device automatically.
3. Run Assistant.

Please refer to the supplied HRDT User Manual for further details of the HRDT System and HRDT Assistant operation.