

SBB 15

SIGNAL BREAKOUT BOX

FEATURES

- Two D-Sub 15 Connectors: provides an in-line connection between a Magtrol DSP Controller and a dynamometer or a torque transducer.
- Four BNC Connectors: provides easy access to Tach A, Tach B, Torque, and Index signals for connecting to an oscilloscope or other data acquisition (DAQ) device.
- Sturdy Assembly: packaged in an extruded aluminum case with metal mounting flanges.
- An external encoder input is provided for connecting high resolution encoders.
- A slide switch allows switching between a torque transducer and an external encoder.



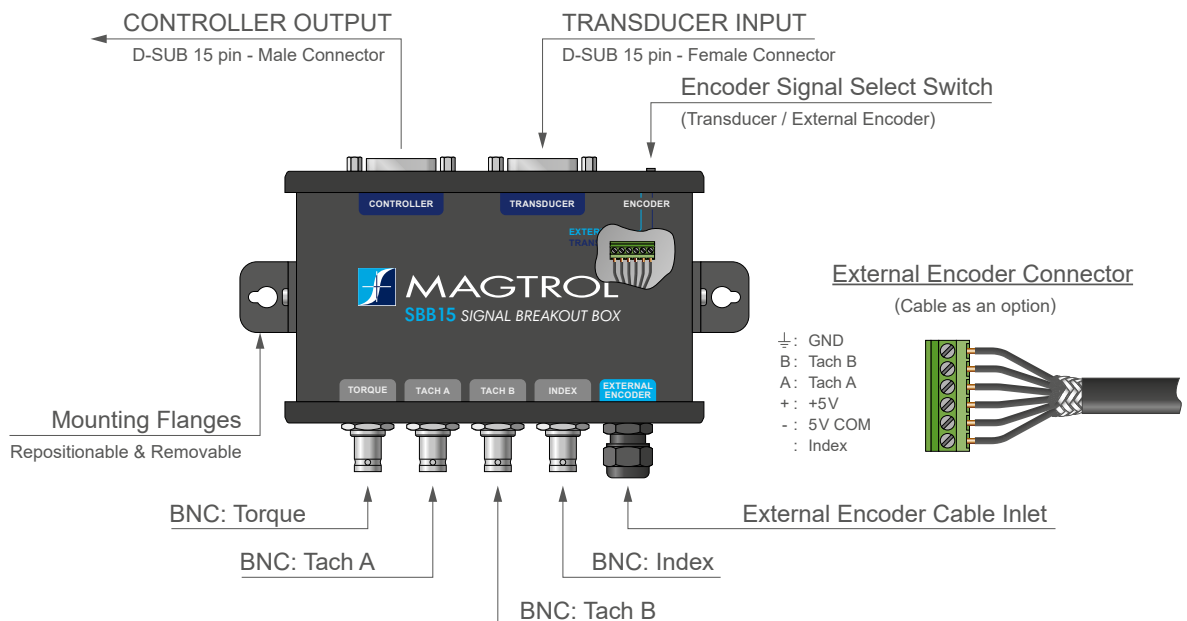
Fig. 1: SBB 15 | Signal Breakout Box

DESCRIPTION

Magtrol’s SBB 15 Signal Breakout Box is designed to assist in the monitoring of speed, torque, and index signals obtained from either a Magtrol Dynamometer or Torque Transducer. The easy-to-use SBB 15 is simply inserted in series between a Magtrol controller and any Magtrol dynamometer or torque transducer. Connections are made via D-Sub 15-pin signal cables.

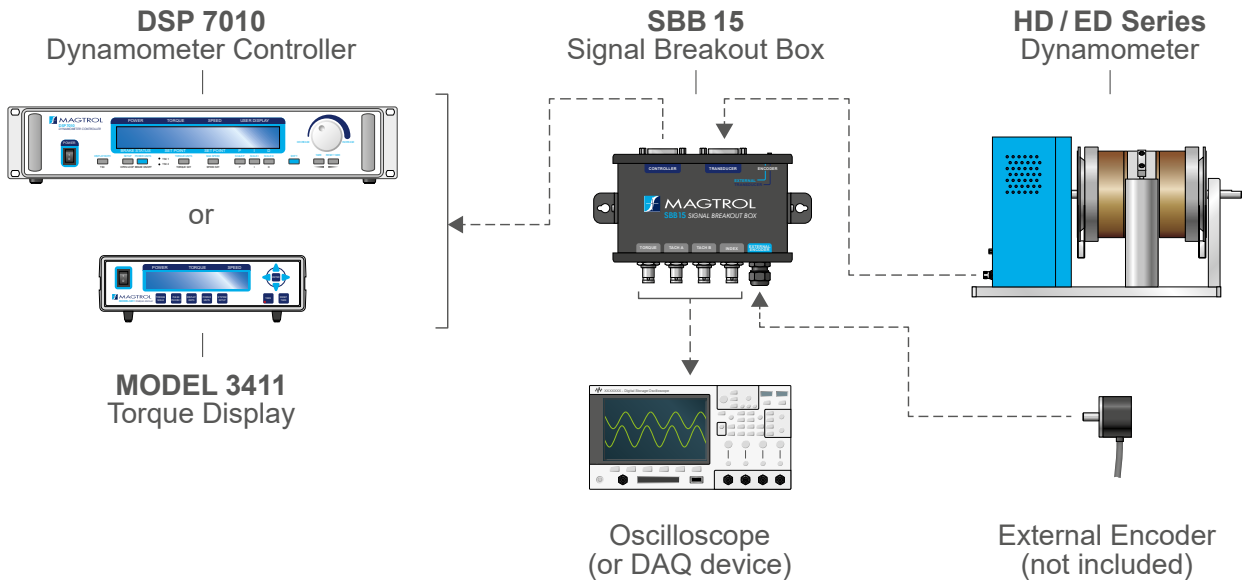
Speed, torque, and index signals are outputted through BNC connectors to an oscilloscope or other DAQ instrumentation device. Switching to the external encoder will switch the Tach A, Tach B, and Index signals, while the Torque signal will still be passed through from the dynamometer or torque transducer. The SBB 15 - Signal Breakout Box is a convenient and reliable accessory that reduces the necessary wiring required for signal monitoring.

INTERFACE

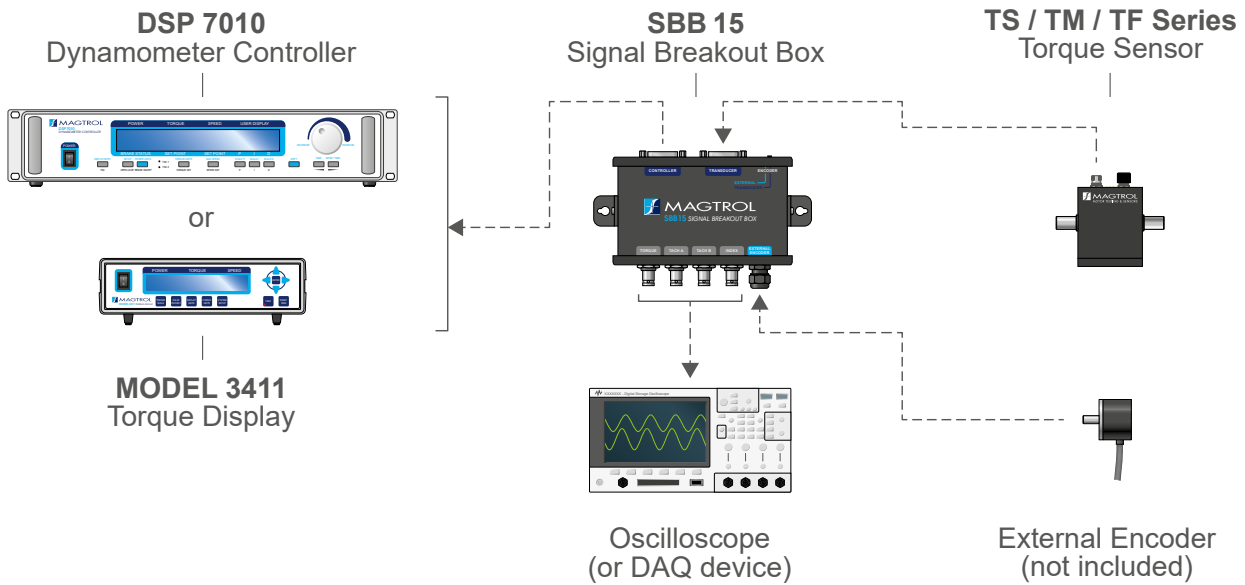


SYSTEM CONFIGURATIONS

FOR USE WITH DYNAMOMETER



FOR USE WITH TORQUE SENSOR

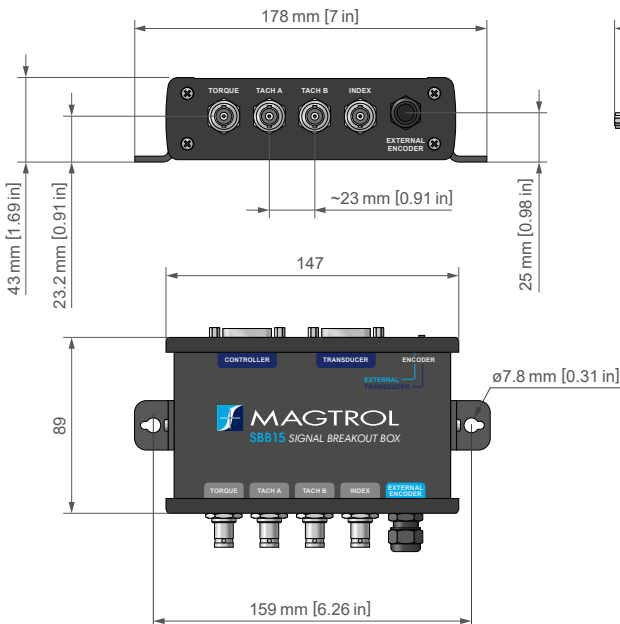


CAUTION: Connecting the Torque, Tach A, Tach B, or Index signals via the BNCs to an oscilloscope or other DAQ device may inadvertently connect the signals with Earth ground.

CAUTION: Connecting to the Torque BNC at the same time as the Tach A, Tach B, and/or Index BNCs will short the two grounds together, which are intended to be isolated.

DIMENSIONS

NOTE: All values are in Metric Units. Dimensions are in millimeters



WEIGHT 450 g / 0.99 lbs

OPTIONAL MOUNTING PLATE

DESCRIPTION	P/N
8 mm T-slot Baseplate (used on PT material)	006925
10 mm T-slot Baseplate (used on HD 700 Series Dynamometers)	007100
12 mm T-slot Baseplate (used on HD 800 Series Dynamometers)	007101

NOTE: 3D STEP files of most of our products are available on our website; other files are available on request.

CONNECTION CABLES

NOTE: All cables are sold separately. To connect SBB 15 with Torque Sensor, please refer to the corresponding product datasheets. If you can't find the right cable or for customized installation, contact your sales representative or our technical support team.

NOTE: Since 2020, Magtrol initiated an upgrade of its device connectivity. Backwards compatibility with previous-generation devices is possible. If needed, our technical support team will be pleased to advise you.

CONNECT SBB 15 TO DSP 7010 or HD/ED SERIES DYNAMOMETER ^{a)}



D-Sub 15-pin - Male Connector D-Sub 15-pin - Female Connector

ORDERING NUMBER 88M368 - _____

0150 : Cable length 1.5 m
0500 : Cable length 5.0 m

a) To connect SBB 15 with Dynamometer HD Series (model since 2023) or equipped with 15-pin D-Sub connector; to connect SBB 15 to DSP 7010 only.

CONNECT SBB 15 TO HD/ED DYNAMOMETER ^{c)}



D-Sub 15-pin - Male Connector Centronics 14-pin - Male Connector

ORDERING NUMBER 88M371 - _____

0150 : Cable length 1.5 m
0500 : Cable length 5.0 m

c) To connect SBB 15 with previous model of HD/ED Series Dynamometer (prior 2023)

CONNECT SBB 15 TO DSP 7000 ^{b)} or MODEL 3411



D-Sub 15-pin - Female Connector Centronics 14-pin - Male Connector

ORDERING NUMBER 88M372 - _____

0150 : Cable length 1.5 m
0500 : Cable length 5.0 m

b) To connect SBB 15 with DSP 7000 Controller (prior 2023)

ORDERING INFORMATION

ORDERING NUMBER 008003

SBB 15 - Signal Breakout Box