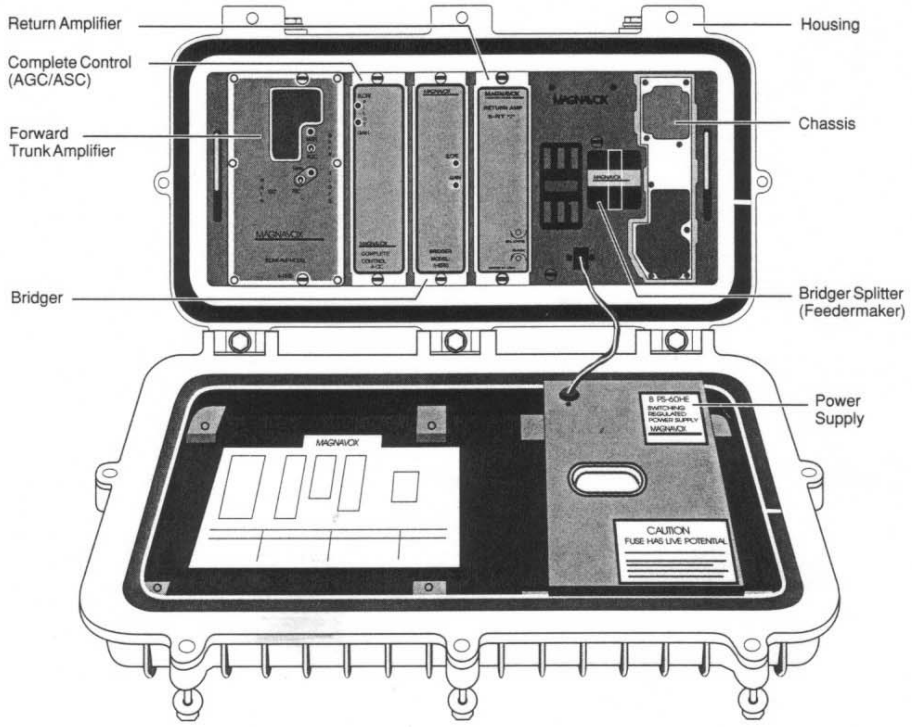
Mainstations

A mainstation, shown below, is a combination of equipment mounted in a housing and placed in the trunk line of a broadband network. The mainstation's primary function is to amplify signals, but it can also be equipped with devices that monitor and adjust signal levels. This section of the catalog gives a detailed description of each component.



Housings	Housings hold and protect all other mainstation components.
Chassis	The chassis interconnects amplifier and control modules and routes signal and power through the mainstation.
Power Supplies	The power supply converts the AC from the coaxial cable into the DC needed to power the mainstation's amplifier and control modules.
Forward Trunk Amplifiers	The forward trunk amplifier module amplifies the forward trunk signal and corrects frequency-dependent attenuation imposed on the signal by the coaxial cable.
Terminating Trunk Amplifiers	Occupying the forward trunk amplifier position, the terminating trunk (or distribution amplifier) amplifies and corrects forward signal before passing it only to the feeder network.
Intermediate Bridger Couplers	The intermediate bridger coupler plugs into the trunk amplifier position, amplifies the signal and sends it to the feeder network.
Forward Complete Control (AGC/ASC)	A forward complete control module works with a forward trunk amplifier to automatically maintain the output level and slope of the forward signal.
Bridgers	The bridger module provides additional amplification to a portion of the forward trunk signal and directs it to the feeder network.
Return Amplifiers	After combining return trunk and feeder signals, the return amplifier module amplifies the signals and routes them toward the headend.
Bridger Splitters	The bridger splitter divides the bridger module's output signal to serve multiple feeder lines.

Mainstation Housings

Specifications*

	Notes	9-TH and 9-TH/I	9-TH/PED and 9-TH/I/PED	Units
Bandwidth		5-1000	5-1000	MHz
Mechanical				
Length	a	18.6 (47.2)	18.6 (47.2)	in. (cm)
Width	a	10.5 (26.7)	10.5 (26.7)	in. (cm)
Depth	a	6.5 (16.5)	6.5 (16.5)	in. (cm)
Weight		19.4 (8.8)	19.4 (8.8)	lb. (kg)
Connectors				
Center Conductor Maximum Diameter		0.14 (0.36)	0.14 (0.36)	in. (cm)
Trunk Port Pin Length	b	1.60 (4.1)	---	in. (cm)
Pedestal Port Pin Length	b	---	2.0 (5.1)	in. (cm)
Feeder Port Pin Length	b	1.60 (4.1)	1.60 (4.1)	in. (cm)
Final Torque				
Hinge and Perimeter Bolts	c	40-60 (4.5-6.8)	40-60 (4.5-6.8)	in.-lb. (N·m)
Distribution Port Plugs	c	30-40 (3.4-4.5)	30-40 (3.4-4.5)	in.-lb. (N·m)
Test Port Plugs	c	30-40 (3.4-4.5)	30-40 (3.4-4.5)	in.-lb. (N·m)
Center Conductor Seizure Screw	d	14-17 (1.6-1.9)	14-17 (1.6-1.9)	in.-lb. (N·m)
Current Rating	e	15	15	A

*All specifications are subject to change without notice.

Notes:

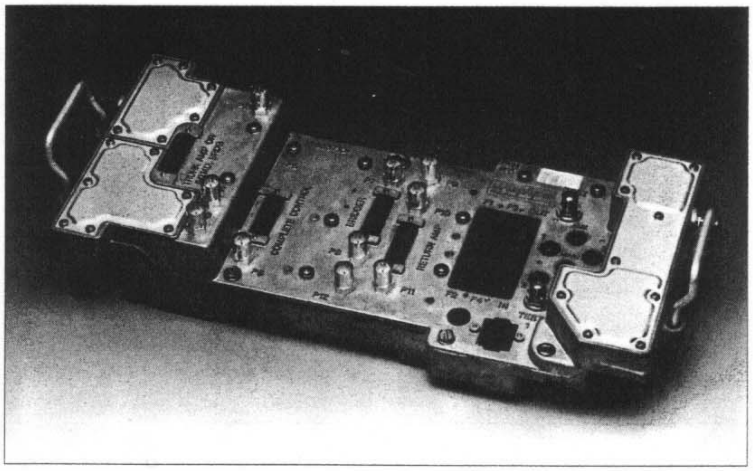
a. Outermost dimensions of closed housing.
b. Also accepts a feed thru connector.
c. Use standard 1/2" driver.
d. Use standard 5/16" driver.
e. 15 amps continuous, 40 amps for 30 seconds with no damage to seizure.

Ordering Information

☎ *To order, call your sales representative at 1-800-448-5171 (in NY State 1-800-522-7464).*

Model	Description
9-TH Series	Mainstation housing, available in these models:
	9-TH — Recommended for aerial applications.
	9-TH/I — With a chromate-conversion finish; recommended for aerial applications.
	9-TH/PED — With additional bottom-entry trunk ports for universal applications.
	9-TH/I/PED — With a chromate-conversion finish and additional bottom-entry trunk ports for universal applications.
Accessories	
***-PS-EXT-KIT**	Power cord extension kit. Needed when rotating the lid of a 9-TH housing. Includes extension cord, clamp, and lid label. Order kits to work with specific power supplies:
	8-PS-EXT-KIT — Power cord extension kit for use with 9-PS-60HE, 8-PS-60/M model 3000762, or 8-PS-60HE/M model 3000761.
	7-PS-EXT-KIT — Power cord extension kit for use with 7-PS power supply.
7th Port Powering Kit	Optional kit that lets you supply power to the mainstation or feeder lines directly through the 9-TH housing's 7th port. Use with a 7-MC series chassis and an 8-PS-60HE/M power supply.

Mainstation Chassis



Spectrum 2000 7-MC Series

The Spectrum 2000 7-MC series chassis routes trunk and feeder signals as well as power through the mainstation.

- Compatible with all existing Magnavox brand mainstation amplifier and control modules.
- Suppression networks protect against transients and power surges.
- Available with dual output bridger option, so you can extend your system's reach.
- Available in a variety of bandsplits for international use.

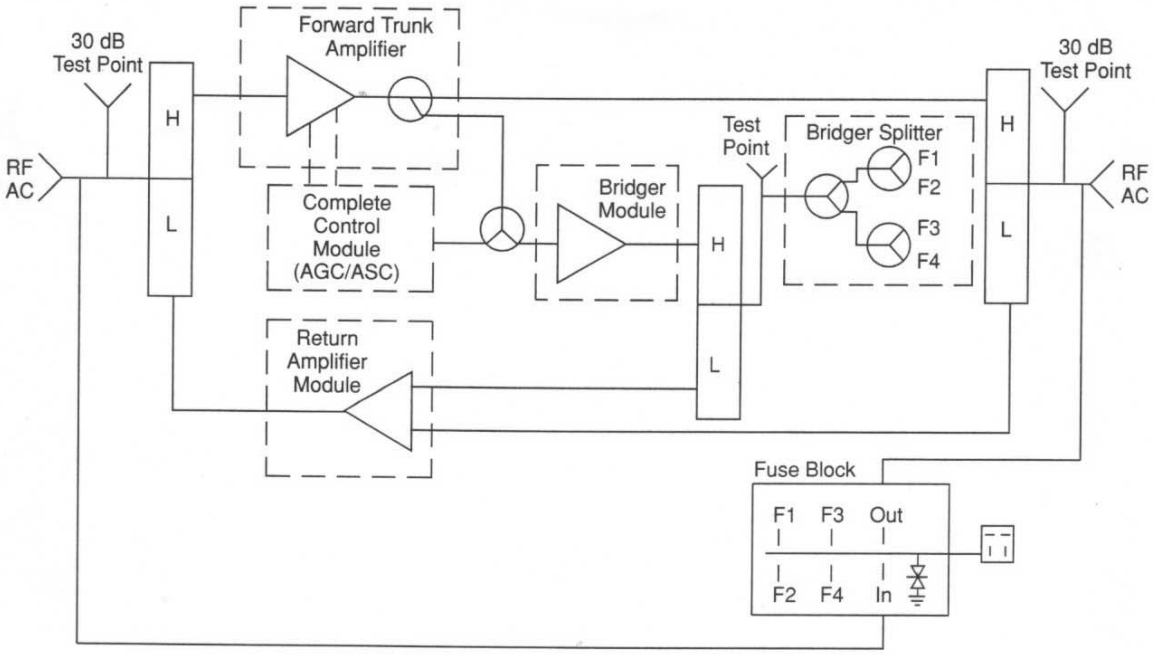
The 7-MC chassis is an interconnection baseplate that fits into a 4-, 5-, 7- or 9-TH mainstation housing. Constructed of a rugged aluminum alloy, the chassis has AC, DC, and RF wiring to interconnect and power the mainstation's plug-in modules.

All chassis have hard-wired, separately shielded diplex filters connected to trunk and feeder ports, permitting two-way signal transmission.

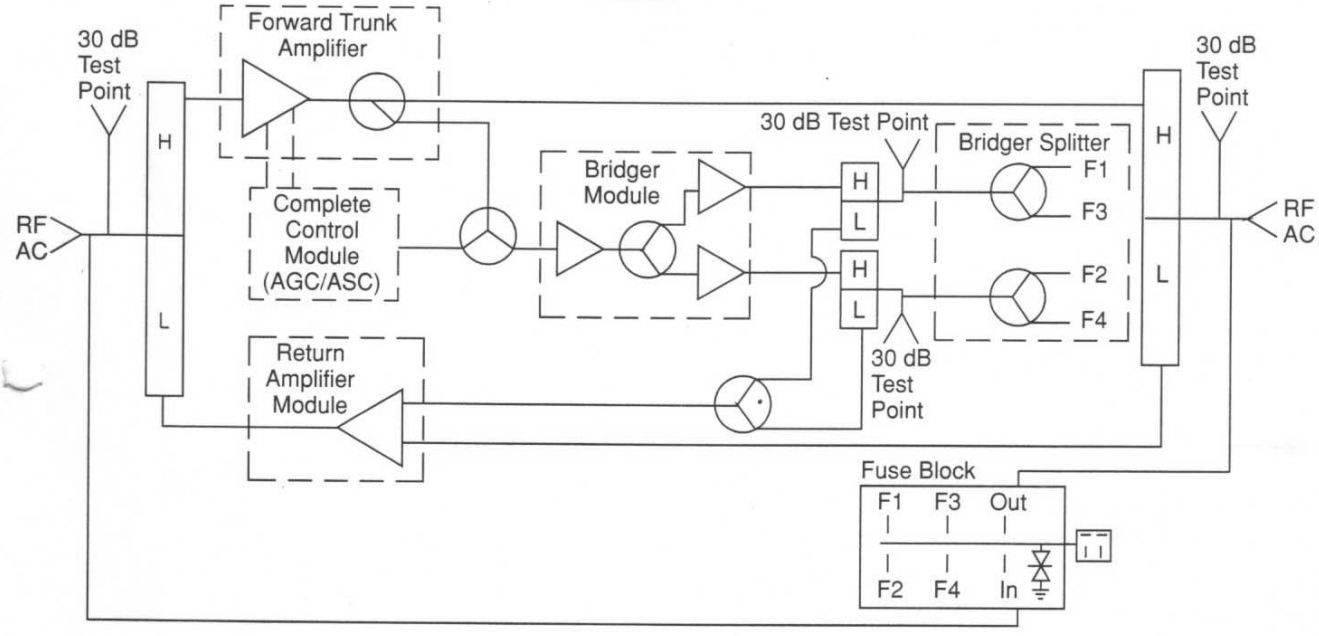
The 7-MC chassis protects your mainstation's electronics in three ways. First, rugged components guard all ports. Then, commonly available fuses protect the chassis from AC overloads. Two 30-Amp fuses come shipped with the chassis for power routing. Fuses for feeder lines are shipped with the bridger splitter. And, you can buy replacement fuses from automotive suppliers. Finally, a standard plug-in surge arrestor (8-SP-150) in the chassis fuse block safeguards against transients and power surges.

Available in several models, the 7-MC series chassis can be used in either RF or fiber optic applications.

Mainstation Chassis

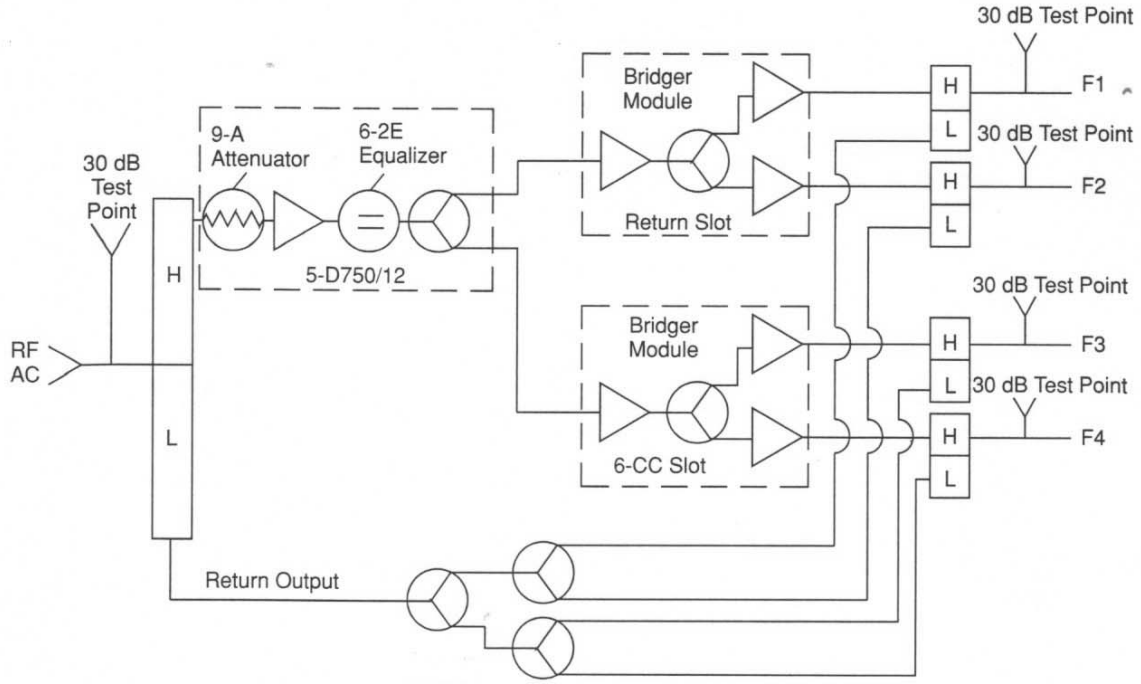


7-MC-2A Chassis

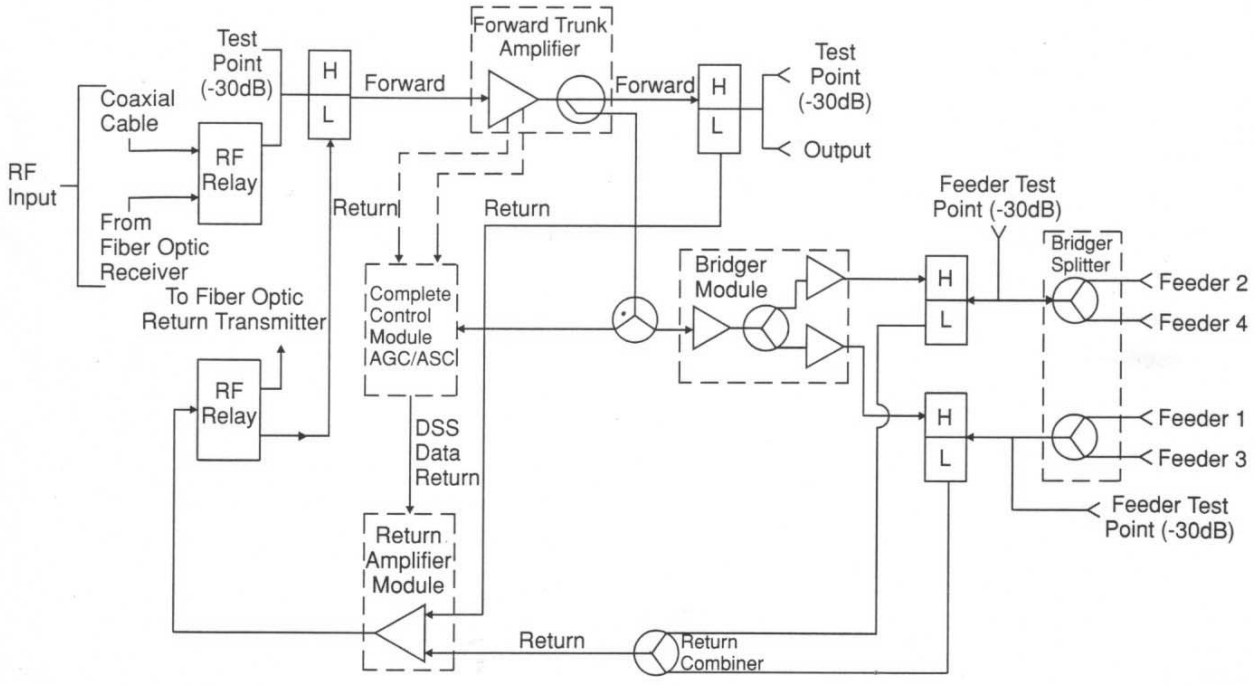


7-MC-6 Chassis

PHILIPS



7-MC-62 Chassis



7-MCF-6 Chassis