



NEWSLETTER

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Current Central Station 2 Version – 4.1.2
Current Mobile Station 2 Version – 2.5

It has been a busy couple of months for us with three train shows. We have met wonderful people and had many great discussions with them. We were able to show the new Central Station 3 to those who attended.

Here we continue on with the topic of the information side of the Mobile Station 2 (60653/60657). If there are any questions about the MS2 please feel free to contact us.

In the second article, we explain how to connect a tablet to the Central Station 2 system for wireless control of a layout.

*****First I would like to add that I have found out the Mobile Station 2 (MS2) will only hold 40 locomotives in the "Loco List." Once 40 locomotives have been reached, the unit will not allow entry of additional locomotives. To add another locomotive, one has to be deleted first.***

Mobile Station 2 Continued

MS2 Software Version

The MS2 can give useful information about itself. In my opinion, the most important information is the software version. It is advised that the MS2 be up to date to minimize problems.

To start, push and hold the "Shift" button and push the MS2 "Setup" button to get into the MS2 configuration.



From here, press the button on the left of the "MS2 information."



Once the “information” is selected, the MS2 will show the serial number (SNR: xxxxx) and the software version (SW: V xx). The current version is 2.5 and should read like this: “SW: V 2.5.”

To update the software, the MS2 needs to be plugged into an updated Central Station 2 or 3 (CS2/3), or plugged into a 60115/60116 Control Box that has an updated MS2 plugged into it. The components should automatically ask if you would like to initiate the update, or you can manually update the unit (see “Update MS2” below).

Current Readings

The Current Readings will give the amps the trains are drawing. This can be read by selecting the “Main” selection. Also, the volts can be seen when “Voltage” is selected. The unit temperature can be selected if the scroll down button is pushed.

Protocols

The “Loco Protocols” can be selected between Digital Command Control (DCC) and Märklin Motorola 2 (MM2) or mfx. There are various selections for a combination of the protocols if desired. The default is a combination of the three protocols and works well.

“Accessory Protocol” enables the user to select between DCC and MM2 protocols for the digital accessories on the layout. One or the other can be selected, but not both. This protocol is independent from the “Locomotive Protocols.”

Update MS2

Here the MS2 can be manually updated if the procedure does not start automatically. Select “Update MS2” and follow the instructions on the screen. Remember the MS2 needs to be plugged into an updated CS2/3, or plugged into a 60115/60116 Control Box that has an updated MS2 plugged into it. Then, follow the instructions on the screen to complete the update.

Factory Default Settings

This selection will erase all locomotive data and set everything back to the factory settings. It will also default the MS2 back to the German language. Choose wisely!

Keyboard

Now that there is some explanation of the MS2 information / setup, I can give a little direction on how to use the Keyboard.

By selecting the “Keyboard” a total of 320 solenoid accessories can be activated. There are 16 positions on each keyboard page (although only 2 positions can be seen at one time) and a total of 20 pages to make up the 320 accessories. The MS2 does not give dip-switch positions for the addresses. The accessory manual will be needed to reference the dip-switch positions.

A solenoid accessory is activated with the two middle buttons on the respective sides.



To scroll through the pages of the keyboard, select the top right button to scroll up and the top left button to scroll down.



To scroll faster push and hold the “Shift” button and turn the knob. (Fig. 1)

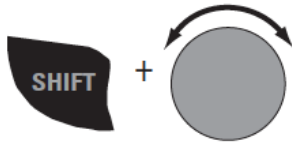


Fig.1 Faster Scrolling

Multiple MS2 Usage

The 60115/60116 Digital Control box will allow for a second MS2 to be plugged into it. This will set up a “master” and a “slave” configuration in the MS2s. The unit with the lowest serial number will always be the “master,” regardless of which port is selected on the Digital Control box or which unit is plugged in first.

When the MS2 is plugged into either front port of the CS2/3, the MS2 will be an auxiliary controller. To access the locomotives as an auxiliary controller, select any locomotive (up to 10 total) from the “Loco List.”

Also the 60125 Terminal can be used to connect more MS2s to the system. The 60125 Terminal allows 4 MS2s to be connected to it (60124 adaptor cable required per MS2). Additional 60125s can be daisy-chained to the first 60125 for 4 more MS2 controllers.

Enjoy Your Hobbies!

Rick Sinclair

Upcoming Appearances:

Largest Collection of “Z” Gauge Model Trains

Guinness World Records Attempt

September 17

Beda’s Biergarten

3230 Broad St.

San Luis Obispo, CA

Trainfest 2016

November 12-13

Wisconsin State Fair Park

West Allis (Milwaukee) WI

Wireless Control with Märklin's Central Station 2 & Mobile Apps

Märklin's mobile applications (apps for short) have been around for several years now; however, there is still a need for instruction on how to set up the protocols necessary for good steady connection. Your application options for your mobile apps are:

Märklin MobileStation	Apple iPhone/Android Phone
Märklin MainStation	Apple iPad/Android Tablet

The two applications are basically the same in function. However, the MainStation app has the capability of live wireless control of multiple locomotives on a single screen. The MobileStation app simply offers wireless control of a single locomotive on the one screen. In this article I will give you a setup guide and hopefully some explanation so that you may better understand how your CS2, wireless router, and mobile app are communicating with one another.

Hardware Setup

Setting up the hardware for your wireless router is quite simple, but it has been a source of a few callouts from our members. The connection to the CS2 requires an RJ-45 plug-ended Ethernet cable that will be tethered to the wireless router (Fig. 1). The other end of the cable must be connected to a LAN port of your wireless router. Do not connect it to the WAN port. To identify the proper port, LAN ports will be gathered in a group of 3 or 4 ports (typically). The WAN port will be separated by some distinction (color or location) from the others. They both use the same plug so be certain you are connected to the correct port. (see Fig. 2).



Fig. 1 - RJ-45 plug

The CS2 Setup

In terms of having successful communication between the router, CS2 and mobile app it would be beneficial to change our perspective on what unit is in command. By default, we may assume that the CS2 is the main controller for the app, but in a small network setup, the router is king.

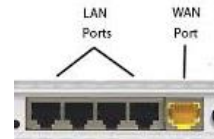


Fig. 2 - LAN vs. WAN ports on router

The router assigns identifying numbers to each device connected to its LAN ports. These are the IP numbers. In most cases, these numbers are assigned automatically (*dynamically*) from the router. They can also be forced into a manual configuration, but for this article we will keep it simple.

IP or Network Configuration Window

The first step is to enter the CS2's Setup configuration mode, then open the IP window from the menu at the bottom of the screen (Fig. 3). At the top of the screen we have the option of setting the IP configuration to either "manually" or "automatically" (DHCP). Note: Setting the IP configuration to "manually" requires you to do setup within the router for optimal performance. Unless you're an IT guy (Internet Tech) or well versed in TCP/IP settings, set it for "automatically" (DHCP).

Below these settings, there are fields for IP Address, IP Network Template, IP Gateway and DNS Server. If any of these fields are blank, then you should click on the DHCP button to the right. Older software versions of the CS2 may say "Renew" instead of "DHCP" and have the same function. The DHCP button will send a request to the router for its assigned IP

information. Remember that the router assigns this number to connected devices. If the hardware setup is correct, then all of these fields should be filled with a series of numbers. The format of the numbers will show as four groups of numbers separated by a “ . ” (period). In the example of Fig. 3, the IP Address is shown as “192.168.1.136.”

Make note of the first three groupings in the IP number field, in this case “192.168.1.” You will use these in the CAN settings. The IP settings in the network settings are now complete.

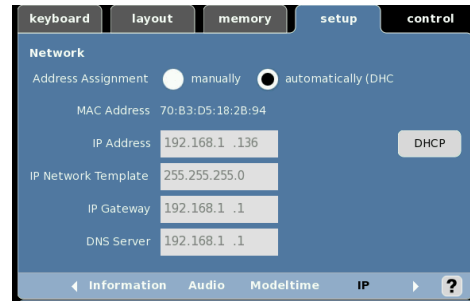


Fig. 3 - IP or Network configuration window

CAN Gateway Configuration Window

Go to the CAN configuration window (Fig. 4), by selecting the CAN button along the bottom menu. In the CAN window, there are only two fields to edit. The first being “Start CAN gateway” pulldown menu. The settings are either “Off,” “auto” or “broadcast”. As I understand it, CAN is an automotive diagnostic reporting protocol. For the CS2, it is used to send information out to any connected reader, therefore I have found it is best to set this at broadcast.

The second field in the CAN window is the “Destination Address” and uses an IP number. In it we will first take the noted IP grouping that I mentioned in the IP configuration (“192.168.1”) and place it in this field. The last group of numbers will be the highest number available for an IP group, which is “255.” This is important because it will broadcast to any IP numbers below that grouping (0– 254). The setting shown is “192.168.1.255.”

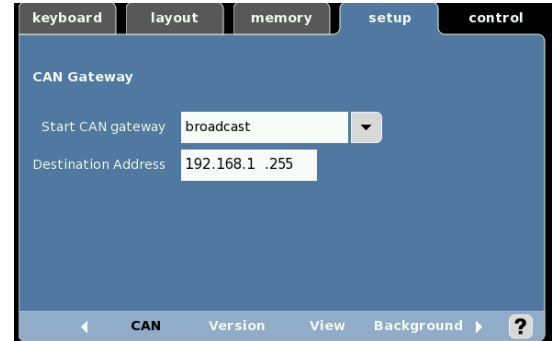


Fig. 4 - CAN Gateway configuration window

We have now completed the setup within the CS2. Please be sure to save all of these changes when exiting the configuration windows. Also, save these changes in the setup menu before shutting down your CS2. This will insure that the settings will hold when you restart your CS2.

Connecting the Mobile Device

Connecting with your mobile device will require you to turn on and connect to a Wireless or Wi-Fi network. Because of its versatility, it is important that you connect to the proper network associated with the wireless router. Many of our users will use a secondary or spare wireless router for their train layout. If you commonly use your mobile device around your house for Internet access, your mobile device may be communicating to an alternate router and the mobile app will never connect to your CS2. In Fig. 5, you may note that the Wi-Fi connection (in blue) is not connected to the “Train Room” router at the bottom of the “CHOOSE A NETWORK...” list.

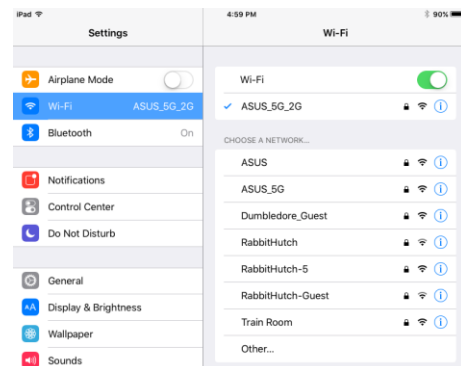


Fig. 5 - iPad Wi-Fi connection settings

Connecting the MobileStation or MainStation App

The last stage of connecting to the CS2 with the mobile app is to connect to the proper CS2. The mobile app may at first connect in DEMO mode. To connect to a CS2, click on the “info” button at the top left of screen, and an information window will display with text in red stating: “Not connected to a CS2” (Fig. 6).

Next, click on the “Change CS2” button to display a list of CS2s (Fig. 7). This list will display any CS2s and their assigned IP numbers to connect to. Select the one that you wish to control so that it is checked, then close the window by clicking outside its borders. You should now have access control of your CS2. Clicking on the “info” button again will now display in green the CS2’s IP Address that we retrieved when we clicked the “DHCP” button. It should now read: “Connected to: xxx.xxx.xxx.xxx” (Fig. 8).

There you have it, the Märklin Digital Club guide to connecting to your CS2 with either the MobileStation or MainStation app. As always, enjoy your hobby and happy model railroading!

Curtis Jeung



Fig. 6 - MainStation Information window



Fig. 7 - CS2 Selection list with IP numbers



Fig. 8 - MainStation now connected to CS2

To contact Curtis and Rick for help with your Digital, technical and product related questions:

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