



NEWSLETTER

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Current Central Station 3 Version – 2.4.1 (0)
Current Central Station 2 Version – 4.3.0 (11)
Current Mobile Station 2 Version – 4.1
Current Mobile Station WLAN Version – 4.1

While the days are getting shorter and colder, we find ourselves once again huddled inside for warmth and on the doorstep of another Christmas. We hope everyone has a safe and joyful Holiday Season!

Our first article is about the basics of the new WLAN Mobile Station and our second article is an overview of system accessories for a layout.

WLAN Mobile Station

Now that the wireless Mobile Stations are available (60667), we have had the chance to get familiar with them. Here is a brief guide to setting up your Wireless Mobile Station.

I will not be going into detail on how to use this Mobile Station. It is basically the same as the wired version, most people will find it very familiar since they work almost the same.

Important Accessory

Once you open the box, you will notice the new Mobile Station looks almost the same as the wired version, except for the lack of a wire and the knob has ridges on it.

Also in the box is a “Pop Socket” (Fig. 1). This is very important because once you steal this to put on your phone, everyone will know that you have the new Wireless Mobile Station, not just your train friends!



Fig. 1 - Pop Socket included.

Power Up

The wireless Mobile Station takes four AAA batteries (not included). Once the batteries are installed, the unit is slightly heavier than the wired MS. There are convenient finger holds on the back to give you a little help holding it (since the Pop Socket is on your phone now).

The WLAN (60117) needs to be plugged into one of the ports of your track box (60112/60113/60114/60116). This is the “WLAN” for the wireless Mobile Station. This will allow you to have a wired MS and a wireless MS.

It is important to note that rechargeable Nickel Metal Hydride (NiMH) batteries can be used but the “Type of Battery” should be changed in the MS settings (see manual for details).

Once all of this is in place, the “Stop” button can be pressed and the wireless MS will power up. It boots up in German and says the access point is active – in German. If you can’t read German, use the following steps to set your preferred language:

1. Power on (as noted above).
2. Press the button next to the “check mark” beside the screen. It is the fourth button down on the right of the screen, (Fig. 2).



Fig. 2 - Lower right button.

3. Press the “Back” button twice (Fig. 3).



Fig. 3 - Back button twice

4. Press the third button down on the right side of the screen twice (Fig 4).



Fig. 4 – Third button down on the right.

5. Press the button on the left side of the screen next to the word “Sprache” (Fig. 5).



Fig. 5 – Third button down on the left.

6. Select your desired language by pressing the button on the left side of the screen next to the language you want (Fig. 6).

Again, this is very similar to the wired MS.



Fig. 6 – Select language.

Setup

Now that it is in the desired language the MS can be set up.

Get into the Mobile Station settings and select “WLAN Settings” Then select “Seek for a LAN”. Select “Marklin WLAN Box <serial number of box>”, and select it.

Now you can enter the password “maerklin160” – all lower case by means of the buttons on the side of the screen or by scrolling through the characters with the dial.

Once the password has been entered, the MS will remember it every time it is turned on. It will retain it also while fresh batteries are installed although we are not sure how long it will retain the memory with depleted batteries.

Additional Information

Like I mentioned, the wireless MS operated almost exactly like the wired version except for a menu item added for the wireless configuration, the menus are the same. What this means is that a reset of the wireless MS to factory settings will delete all locomotive data, but it will also erase the WLAN connection and password, so everything will need to be entered again. This will also set the language back to German so the language would need to be selected again as described above.

A second wireless MS can be added in the same way as the first. The wireless MS with the lowest serial number will be the “Primary” device and the higher numbered MS will be the “Secondary” device. This means that the secondary MS will use the locomotive and keyboard data from the primary MS. The wireless MS can be turned on its side to the left or right and the screen will turn also, it will not turn upside down though.

As a bonus, commands from the joystick controller from the “My World” line can be received by the WLAN (60117) box, so this means that a child’s controller can control their trains on a parent’s layout. Also, the WLAN can be plugged into the front of a CS2/3 3+ and be a secondary wireless controller for the CS.

One minor change is with the added WIFI components inside the card slot has been deleted.

I hope this brief startup guide will help, and everyone enjoys their wireless controller.

Enjoy your hobbies!

Rick Sinclair

The Expansion Path and other Peripherals

In this issue, I investigate what you will want to look at when your model railway grows, and you need to keep it powered and under control.

The list of products available for use, in any type of expansion, is listed below. Not all products are required as your needs will vary. I will discuss many of the combinations of the articles listed.

60215, 60216, 60226 - Central Station 2, 3, 3+
60657 - Mobile Station
60667 – Mobile Station (wireless)
60175 - Booster
60041 - 60046, 60195 - Switched Mode Power Packs
60881 - 60883 - S88 Feedback Module
60884 - Adapter Cable for S88 (60881, 60882 only)
66360 - Switched Mode Power Pack for 60883 (S88 Link unit only)
60145 - Terminal (9-pin w/ 4 x 7-pin)
60123 - Connecting Cable (6 to 9-pin)
60124 - Adapter Cable (for Mobile Stations 10 to 7-pin)
60126 - Extension Cable (9 to 9-pin)
60114 - Connector Box for 1 Gauge (Mobile Station Only)
60116 - Connector Box (Mobile Stations Only)
60117 - Connector Box (Mobile Station WLAN unit)
60122 - MS II Hub (Distribution Device)
74041 - FCC Interference Suppression Set, 2 Amps (please read section 'Suppression Set')
74044 - FCC Interference Suppression Set, 5 Amps (please read section 'Suppression Set')
60200 - Connector Adapter for Switched Mode Power Pack
60128 - Connect-6021

Controllers (60215, 60216, 60226 or 60657, 60667)

Additional Controllers are not a necessity if you only seek to expand your power/control supply to your layout extensions. Conversely, you can increase your control surfaces without needing to expand your power range. There are 3 general conditions when expanding your control devices, Multiple CS's (Central Station), CS w/ MS (Mobile Station), or multiple MSs.



Fig. 1: CS3/3+

Multiple CSs require a 60123 to connect either directly to another CS or to a terminal (60145). For any additional Central Stations (Fig. 1), you will also need an additional and specific power pack (SMPP) for your region (i.e., 120v or 230 v).

CS with MS - no additional accessories are required as the Central Station has direct inputs for Mobile Stations. If you need a longer distance between CS and MS, a 60124-cable adapter with a 60145-terminal would be used.



Fig. 2: Mobile Station

For expanding controllers on a Mobile station (Fig. 2) only layout, you will want either the 60116 or the 60114 Digital Connector Box. The 60114 is for 1 gauge (or LGB) product only. These allow for multiple MS connections to a single SMPP.

Our newly released MS unit is the Mobile Station WLAN (60667). It is a new wireless controller and is written about in the accompanying article in this newsletter. As a standalone controller, it requires the new 60117-connector box. The 60117 is not required when connecting your MS to a CS.

Switched Mode Power Packs (SMPP)

SMPPs (Fig.3-5) became a standard regulation about the time of release of the CS3. They are more efficient, lighter weight and less hazardous than the older transformers. A CS3 will not operate properly with a standard transformer. SMPP's are needed for any CS, booster, or MS. You should choose the SMPP with the power rating that matches your area.



Fig. 5: SMPP



Fig. 4: SMPP for 1 or G gauge



Fig. 3: SMPP for MS

Boosters

The Booster unit-60175 (Fig. 6) is the bread-and-butter unit if you need to expand your digital control range. In most cases a layout will become deficient in its digital integrity long before it becomes deficient in its power output. Boosters are necessary to re-vitalize your control signal. Each booster will require its own SMPP and a specific area of track to supply signal too. These areas will need to be isolated using track insulators (74030 for C-track)



Fig. 6: Booster

A single booster can be connected to a CS without any additional equipment. For additional devices that need access to the 7-pin port, then the terminal (60145 is necessary). The 7-pin port is utilized by additional boosters as well as the S-88 link (60883).

Feedback Modules (S88)

For those of you using S88s (Fig. 7), I will not go into too much detail as the S88s have their own expansion path. They typically use ethernet style wiring. The exception is the S88 Link which requires connection to a 7-pin port and the 60145-terminal is recommended (see above). The S88 Link also requires its own SMPP. The smaller 66360 style SMPPs are recommended.

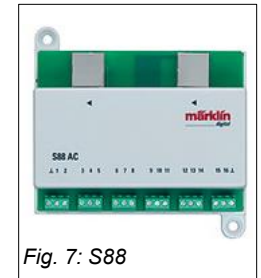


Fig. 7: S88

Extra 7-pin Ports Needed, The Terminal-60145 (Fig. 8)

The 7-pin port is the signal bus for boosters and the S88 Link. The CS2 and CS3+ have a single 7-pin port, whereas the CS3 has 2 ports. The extra port on the CS3 can logically be associated with the backward compatibility path of older S88s that do not use the ethernet wire connections. To summarize:



Fig. 8: 60145 Terminal

*CS3 could connect 1 booster, 1 S88 link (60883) in the two 7-pin ports.

*The CS3+ could connect to 1 booster. The S88 (60881, 60882) would use the ethernet connection at the bottom of the CS3+. However, you would lose backward compatibility with older S88 (6088, 60880).

*A CS3+ that is backward compatible would require 1 booster, 1 60145 terminal and an S88 Link (60883). Likewise, the same applies to a CS2 that is using a booster with the newer S88s.

Essentially, if you need more 7-pin ports than what is available, the 70145 terminal is a must have. It supplies you with 4 7-pin ports (expanding 1 port to 4).

Connecting Cable 60123 (Fig. 9) CS to CS

This is the main cable for connecting two Central Stations together and was discussed in the 'Additional Controllers' section. The 6-pin plug connects to the controller assigned as the Main; the 9-pin plug connects to the Auxiliary controller. Systematically speaking, the extra pins allow for the return of data to the Main controller.

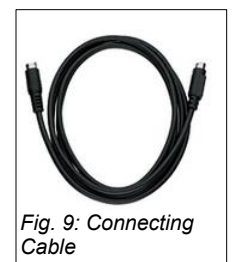


Fig. 9: Connecting Cable

Adapter Cable 60124 (MS to 7-pin terminal)

The 60124-Adapter (Fig. 10) is primarily used when you need to extend the connection to a Central Station. The MS uses a 10-pin plug, so the adapter allows you to plug into a terminal (60145) extension. This type of connection can give you an additional MS connection if the MS slots on the CS are already in use.

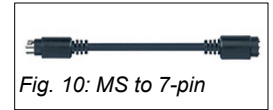


Fig. 10: MS to 7-pin

Extension Cable 60126 (9-pin to 9-pin)

The 60126-Extension Cable (Fig. 11) can be used to expand the separation between two CSs, between a CS and a terminal box (60145), or between two terminal boxes that are chained.



Fig. 11: Extension Cable

Multiple Mobile Stations (Connector Box)

There are two Connector Boxes (Fig. 12) available, the 60114 and 60116. These are for use with the smaller Switched Mode Power Packs (66360, 66367, 66362). They are for users who do not have a CS. They provide connection of 2 Mobile Stations.



Fig. 12: MS connection box

The 60116/60117 has wired connections for C-track. The spade ends will need to be cut for use with HO K-track and Trix N-track. The 60117 is the New WLAN box for the MS-60667.

The 60114 unit is wired for 1-gauge users (i.e., they have 1-gauge rail connections). Although it is not stated, I would imagine the rail connections can be clipped for use with LGB.

There is no stated data available if the amp rating on the 60114 is higher compared to the 60116.

The 60112 is a distribution hub that can be connected to a 60116 or 60114. It enables connections of up to 5 MS controllers. With two 60112 units you can connect 10 MS controllers to a 60114 or 60116.

This item number is in grey as it is written for use with the 60113 (the older model of 60114). Updated versions will likely be in black to coincide with the color of the 60114.

It cannot be connected to a CS directly; a 60145 terminal must be used.

FCC Interference Suppression Set (74041, 74404)

These devices (Fig. 13) are for connection with either MS controlled layouts or CS controlled layouts, based on the amp ratings (74041 = 2 amp for MS, 74404 = 5 amp for CS). These are a US only requirement and are typically supplied in full set boxes.

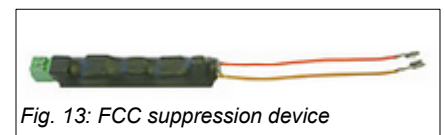
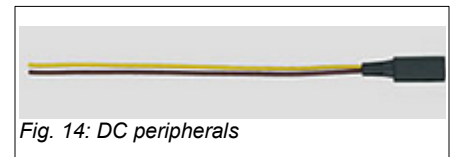


Fig. 13: FCC suppression device

I recommend not using them unless you have unusually high electrical interference which may interrupt your track control. In other words, if your hair is constantly standing or you always look frightened in the mirror, then you may have a case for using this device.

Peripheral Connections

This is just a connection adapter-60200 (Fig. 14) that allows you to make direct connections from the 4-pin mini-DIN connection of the larger Switched Mode Power Pack for use with non-track electrical connections (i.e., lighting or motor control boxes). It is described as having a high current output.



I have not seen any of these in use, but it is like earlier model digital controllers (6021) that supplied separate connections to Track and DC devices. Red and Brown output for track, yellow and brown output for Accessories. The 60200 supplies a power line for DC devices (yellow and brown connections if you will).

Connect-6021

The Connect-6021 (60128) is the ultimate backward compatibility unit for users with the earliest of Digital Control Systems, 6021-controller. It has the same form system as the early model square black and white boxes. It allows you to integrate the old controls systems into the modern CS2/3/3+ controllers.

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Upcoming appearances:

- **ONLINE Webinar**
Dec 13, 2023
- **Amherst Railway Society**
January 27 & 28, 2024

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